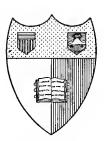
RJ101 N7E6n



New York State College of Agriculture At Cornell University Ithaca, N. P.

Library

Child Health in rie County, New York

The report of a brief co-operative inquiry into conditions relating to child health and the agencies for dealing with them, in the rural sections and villages of Erie County, New York, Nov.-Dec., 1921.

Reprinted from the Supplement to Mother and Child, Magazine of the American Child Hygiene Association, issue of May, 1922

The National Child Health Council

Seventeenth and D Streets Northwest Washington, D. C.



The original of this book is in the Cornell University Library.

There are no known copyright restrictions in the United States on the use of the text.

Table of Contents

| 1. | Introduction | 1-4 |
|-------|--------------------------------------|---|
| II. | Summary | |
| III. | The Under School Age Child | |
| IV. | Medical School Inspection | |
| v. | Medical Service | 27 27 |
| VI. | Nursing in Relation to the Child | |
| VII. | Health Teaching in the Schools | |
| VIII. | Organization of Children | |
| IX. | Recreation | $\begin{array}{c} 48\text{-}50 \\ 50 \end{array}$ |
| Х. | Nutrition of ChildrenRecommendations | |
| XI. | Health Officers | |
| XII. | Mental Hygiene of Children | |
| XIII. | The Health of Dependent Children | 80-82 82 |
| XIV. | Health and Working Certificates | |
| | Additional Material | 89 |

Child Health in Erie County, New York

I. INTRODUCTION

The National Child Health Council was formed late in 1920 by six national organizations as a common meeting ground for coordination of activities relating to the health of children.

How the field services of national associations for children may be increasingly the result of common planning and correlation is one of the important problems that have been presented for solution.

As a first step toward finding an answer to this question a cooperative inquiry into child health in some one county was decided upon. It was agreed that the chief object of the inquiry should be to aid the development of strong and effective coordination of local health work, in the interests of an adequate and balanced child health program. But it was also agreed that no recommendation should be made to increase the comprehensiveness of the immediate program of local child health activities at the expense of the development of such effective local coordination.

The first invitation came from Erie County, New York. The following representatives joined in requesting such an inquiry, under the Council's auspices, into conditions in the rural areas and villages of that county:

| Erie County Children's Aid Society | | | | | | |
|--|--|--|--|--|--|--|
| Erie County Home Bureau Mrs. Cleo B. Nield, Chairman Executive | | | | | | |
| Committee | | | | | | |
| Eric County Medical Association Dr. Arthur G. Bennett, President | | | | | | |
| Erie County Physicians' Protective | | | | | | |
| AssociationDr. John H. Pryor, President | | | | | | |
| Junior Red Cross | | | | | | |
| School District No. 1 | | | | | | |
| School District No. 2 | | | | | | |
| School District No. 3 | | | | | | |
| School District No. 4 | | | | | | |
| School District No. 5 | | | | | | |
| State Department of Health | | | | | | |
| spector | | | | | | |

The State Department of Health and the State Department of Education both expressed their approval of the invitation of the local Erie County group that such a study be made and offered their cooperation.

The organizations which participated in this study through a staff member or a delegated representative were:

American Child Hygiene Association
American Red Cross
Child Health Organization of America
National Child Labor Committee
National Organization for Public Health Nursing
National Tuberculosis Association
National Committee for Mental Hygiene
New York Child Labor Committee

It is not possible to list the names of all who were consulted to a greater or less extent in the preparation of plans for the Eric County study, and in the preparation of the material included in this report. The Council wishes to make acknowledgment especially to the following departments, bureaus and organizations or representatives of them:

American Social Hygiene Association Federal Children's Bureau National Health Council New York State Department of Education New York State Department of Health U. S. Bureau of Education U. S. Public Health Service

The actual period of the field work upon which this report is based was slightly less than two weeks, beginning November 28, 1921.

The statements of fact and recommendations are herewith presented, not as a report of a comprehensive survey but merely as a

primary contribution toward the coordination of health work for children. They deal with present conditions as found in Erie County and are not necessarily considered applicable elsewhere.

II. SUMMARY

Erie County* presents a widely varied picture of American child life, including, as it does, a rapidly developing manufacturing area radiating from the City of Buffalo and some completely rural sections in the southern lowland and mountainous districts, in some of the least accessible of which may be found many of the characteristics of farm life as it was in this country during the latter part of the last century.

Urban and Rural Development—Buffalo, situated on Lake Erie, as a manufacturing and shipping center, has grown rapidly, especially if development in the metropolitan area is considered. The population of the municipal area alone increased by 71,000 in the period of 1900 to 1910 and by 83,000 from 1910 to 1920, making its present population 506,775. Springing up here and there on radial lines around the city, first to the south and east, but increasingly in the northeast direction, are satellite manufacturing centers which are beginning to mark out a fairly well defined area of industrial development.

The steady growth of population around manufacturing and trade centers rather than in the farming area of the county is only a continuation of what has been going on in this country for many years. The number of farmers in Erie County decreased from 8,178 in 1910 to 7.486 in 1920, while manufacturing largely increased. The indications are that a certain outlying area around the City of Buffalo will continue to develop as a manufacturing and urban 'section and ultimately will probably be absorbed into the life and organization of the city. This has been anticipated through the appointment of a city plan commission which under able leadership is working out a farseeing plan for ultimate development of this metropolitan area.

Bearing Upon the Health of Children—In the meantime it would appear that the manufacturing and trade centers which have been springing up, a number of which will not be included in the city's administration for many years to come, are notably increasing rather than decreasing the already difficult problem of preserving and promoting health in the rural areas of the county. The infant mortality rate of some of the communities is perhaps the best supporting evidence for this statement. The average infant mortality rate for the part of the county studied for six years (1915-1920 inclusive) was 90.5. Similarly the average tuberculosis rate for this period was 74.0. The rates for some of the communities having the highest rates were as follows:

^{*}Erie County, as covered by this inquiry into conditions affecting child health, does not include Buffalo, Lackawanna, Tonawanda, Lancaster and Gowanda.

| Town or Village. | Population in 1920. | Infant Mortality Rate (1915-1920) | Tuberculosis Death Rate (1915-1920) |
|----------------------------|------------------------|--------------------------------------|--|
| For the entire area studie | ed91,906 | 90.5 | 74.0 |
| Depew village | 5,850 | 134.6 | 74. |
| Sloan village | 1,791 | 129.9 | 33. |
| *Cheektowaga town | 9,2 30 | 126.4 | 104. |
| *Hamburg town | 4,070 | 113.4 | 77. |
| Springville village | 2,331 | 105.8 | 93. |
| Clarence town | | 97.7 | 81. |
| *North Collins town | 1,113 | 94.4 | 36. |
| *Brant town | | 95.8 | 132. |
| *Alden town | 1,678 | 93.3 | 62. |
| Angola village | 1,367 | 83.3 | 156. |
| Farnham village | | 66.0 | 145. |
| Hamburg village | 3,185 | 68.0 | 118. |
| *Evans town | 2,101 | 76.6 | 103. |
| West Seneca town | 7,062 | 66.9 | 100. |
| *Collins town | 3,221 | 71.7 | 78. |
| North Collins village | 1,158 | 44.4 | 105. |
| Holland town | 1,410 | 93.5 | 33. |
| *Lancaster town | 2,165 | 123.6 | 122. |
| *Tonawanda town | 2,345 | 120.9 | 63. |

^{*}Not including the villages in the township limits.

COUNTY RESPONSIBILITY FOR TRADE AND PHILANTHROPY—The County of Erie has officially recognized the interdependence of rural and urban districts in the promotion of trade. An achievement of which the county is justly proud is the development of its system of roads which serve as arteries stimulating the entire economic life of the farmers, industrial workers and tradesmen of all classes. The County Board of Supervisors and the County Engineer, acting for both city and rural sections, not only have built highways but have assisted substantially in the development of the County Farm Bureau for the improvement of agricultural methods of production and distribution. The county also recognizes the impossibility of dealing with its less fortunate citizens and the derelicts of civilization on any but a complete basis for the entire county area. Its appropriations for solely charitable purposes during the coming year exceed one million one hundred and eightyfive thousand dollars (\$1,185,000) without counting the hundreds of thousands of dollars devoted to correctional institutions and activities.

The number of children under care of the Superintendent of the Poor in December, 1920, who came from homes in the county area studied, were 118, or approximately I for every 10 of the total children under his care, outside of institutions, from the entire county including

the large cities. The County stands ready, out of its very substantial budgets for charitable and correctional purposes, to take care of any citizen needing charitable care, whether a resident of Buffalo or of the remotest section of the county.

Health a Minor Consideration—Unfortunately attention to the health of its citizens has a very minor part of the county's interest at present. When it is considered that in the preservation and promotion of health and sound development lies the real strength of any section of the country, it is apparent that concentration on this problem is urgently needed.

Health Problems of the County—The health problems of Erie County are serious. But unfortunately plans for dealing with them need not be complicated by the extreme conditions of either the largely isolated rural county or the one that is chiefly an over-crowded industrial and urban area. Erie County, therefore, with her resources and transportation facilities, can take up her health problems in a thoroughgoing way, knowing that she will secure concrete results in lives saved and in sound young men and women growing up to take their places in the life of the county.

One of the most serious problems she faces is shown by the high infant mortality figures in some of the centers of population as quoted above, which is hardly being more than touched by the infant welfare activities mentioned elsewhere in this report.

Physical Conditions and Environment—In the medical examinations conducted by local examiners under the regulations of the State Department of Education there were 11,350 children reported upon for the year 1920-1921. The examiners reported a grand total of 11,218 defects with only 3,553 children reported as "normal." Only about 26 per cent of these defects were treated as far as shown. The serious results in later life, of defects of early childhood which remain uncorrected, are too well known to be emphasized here. The figures given are only an indication of what the problem is in Erie County because the medical examination system at present in operation there could not be counted upon to reveal more than a fraction of the defects that exist and in many of the school districts there is no thorough follow up to see that the defects found are corrected.

In order to safeguard the health of its children and adults, the supervision of the milk supply and the water supply of Erie County outside of its larger cities needs to be greatly improved. The same is true of the question of disposal of sewage, upon which much needs to be done before the conditions in rural Erie County can be brought up

to compare with those in counties where the subject has received special attention for several years. This can be said also of the important question of the control of communicable diseases, in which, however, more progress has been made.

Education—Vital as are these measures for the improvement of food and physical environment and correction of defects through trained service, they should not overshadow the importance of an understanding of the ideals of health, strength and sound citizenship, which can only be thoroughly taught during the formative periods of life. The youth of the agricultural sections of Erie County and in the smaller communities are those who through their thoughts, their ideals, and their actions will have a large part in determining the health and the social and economic status of the county during the next 10 to 25 years. The training of teachers and pupils in the public schools in health is, therefore, a most important problem, toward the solution of which only the barest beginning has been made.

Mental Health—The mental hygiene problem of rural Erie County is indicated very largely by the typical instances cited elsewhere in this report and by the present lack of facilities for children of the county. Only in some of the large village schools is any provision attempted for atypical children, and even there no special classes have as yet been organized. In the small school districts there is no such thing as mental hygiene work. The Lockwood law, which provides that any school district that has ten or more markedly retarded children shall establish a special class for them, remains a dead letter due to the fact that nowhere has the exact number of atypical children been scientifically determined. No provision exists for mental examinations of delin quent children coming before the justices of the peace.

Public Health Activities and Resources

County Appropriations—So far as the County of Erie as a unit is concerned the chief attention that has been given to health has been through the provision of funds for the care of sick patients in institutions. The appropriation for the coming year of fifteen thousand dollars (\$15,000) to the J. N. Adam Memorial Hospital for the treatment of early tuberculosis in adults and in children, is particularly significant from the health standpoint. Payment of five thousand dollars (\$5,000) for laboratory services also is a valuable contribution to the preservation of the health of the community. But these appropriations are insignificant as compared to the nearly two million dollars spent for charitable work and leave largely untouched the field of preventive effort in which the county could do such effective work.

Public Scrvants—The sanitary supervisor of the State Department of Health for the District deserves much credit for what he has done in the rural and the smaller centers of population of Erie County, but with 5 counties under his charge he is obviously unable to give as close and continuous advisory help to the individual health officers as he would like to give.

In estimating the public resources available for the preservation and promotion of the health of children in Erie County we should consider among other forces the local health officers, the schools and what they are doing, the public health nurses employed in the different parts of the county, and the mental hygiene and nutrition agencies. These will be dealt with more fully in subsequent parts of this report. A brief mention of some of them here, however, is important as a basis for judging how far these resources are adequate to their needs.

The Health Officers—We can only praise the State Health Department for the strides forward which have been made through the development of sanitary districts and the supervision of local health work. However, when we consider the individual health officer and the difficulties that he faces it is easy to understand why further progress cannot be made without further improvement in the system. The health officer in the rural sections of the county, who is a practising physician, on an average salary of three hundred and seventy dollars (\$370) per annum, must make his practice his main consideration. He has numerous duties placed upon him which demand more time and energy than he can give at the present rate of pay. Many of the health officers are doing the best they can, and considering their handicaps a few are doing unusually good work, especially in the handling of communicable diseases.

On the other hand the bacteriological testing of milk used locally in the rural sections is almost unknown, and the control of dairies by the local health officer is so slight as to be almost valueless. There is even a serious question whether the average physician, who is earning his living by practicing in a community, will always feel that he can afford to enforce the laws strictly, even if he does closely inspect the dairies.

The laboratory examination of water supply is more of an exception than a rule. A great improvement would be possible in the control of communicable disease if health officers could devote their main attention to the duties of their office.

Medical Examinations—We question those critics of the medical examinations in the Erie County schools who characterize them as "worthless." In spite of their hurried character in most instances

we certainly do not agree that they should be abolished. When some school trustees secure bids for the conduct of such examinations at the lowest price with no expectation of requiring that they are to be thorough, and when a physician devotes less than two minutes to an examination, it is not an indictment of medical examinations in general but of the present methods in the county which result really in hurried inspections rather than examinations in the majority of instances. The figures given by the State Department of Education as to treatment secured, as quoted in this report, would seem to show a real value even from this superficial type of work.

Such value as it has, however, throws into high relief the great possibilities that medical examinations would have if they were thorough and if at the same time they were followed up to secure the correction of defects that have been discovered.

Nurses-So far as nurses employed from public funds are concerned, there are so few that they have been able only to touch the fringe of the nursing problem. There are four, working under departments of health in four towns, and their energies are almost exclusively absorbed in problems of the villages so that they are able to give little attention to the children in the homes or the schools of the rural areas. The supervising nurse (representing the State Department of Health) with two sanitary districts, including a number of counties, under her supervision, can not give adequate advisory help to the individual public health nurses of Erie County. How far this work of nurses employed on public funds is supplemented by that of public health nurses employed by private funds will be referred to later. The fact is that the work of both groups together results in only a few good demonstrations of what might be done all over the county if there were more of these public servants who are making such a tremendously valuable contribution to the health of the nation.

Health Education in the Schools—The schools should be one of the chief centers of health work, especially in the educational field. Besides the stimulation from Albany directly and through the superintendents of schools, there has been a special campaign promoted by the Junior Red Cross and carried out by the superintendents. This has attracted the interest of teachers and pupils to the importance of normal development, through weighing and measuring the children. This campaign has been a valuable introduction to consideration of health in the schools. It has shown something as to the extent of undernourishment in the schools and the great need for following up this discovery with positive and constructive measures. The teachers are eager for some information and for more thorough and intensive guidance in

this work than it is possible for the over-taxed superintendents to give them. The following quotations from teachers are examples of the attitude of many on the question of food habits:

"Bread and coffee constitute the chief diet of many of our children."

"If you would ask me what we need in our schools I would say good teaching on eating. But I don't know how to teach it, so I just talk about being properly nourished."

"Will you tell me a good book to study so that I can know what to teach the children? I have a hard time giving them what they like to eat. The last three days we have had macaroni, potatoes and bread pudding for lunch and, my, how they like it!"

Just a Beginning—Too much credit cannot be given to the superintendets for the good work they have done in arousing interest in the subject of health, in promoting weighing and measuring of children, securing scales for the schools through cooperation with the Junior Red Cross, and generally encouraging consideration of health questions. However, they are the first to recognize that what they have done is merely a beginning. The superintendent in Erie County has forty to sixty schools under his supervision and many obligations not only to the schools but to the State Department of Education, in connection with their general curricula. He has a small budget, no district-wide supervisory assistance, and a large territory, and, therefore, cannot, as an individual, do more than introductory work in the health field.

Mental and Social Health—The principal mental health resources existing in the county are the Buffalo and Gowanda State Hospitals, located respectively in Buffalo and in Collins. These hospitals are required by law to conduct out-patient mental clinics in the districts which they serve. Outside of Buffalo, however, no such clinics have as yet been established. In order to make psychiatric service available for the schools, justices of the peace, overseers of the poor, health officers and other officials throughout the county, these hospitals might organize an itinerant mental clinic to visit each of the twenty-five townships in the county outside of Buffalo twice a year.

The most important potential resources for child mental hygiene are the schools themselves. Within the school system and as integral parts of it should be developed trained personnel, facilities and equipment for group and individual mental testing, investigation of retardation and behavior anomalies, psychiatric social work, and most of the actual remedial work with atypical children

Here should also be mentioned the Erie County Board of Child Welfare and the office of the County Superintendent of the Poor,

which are charged with the care of dependent children, many of whom present mental abnormalities.

The meager reporting and follow up of venereal diseases, the beginning of the growth of scout organizations and clubs for wholesome development of the children and such teaching of health habits as exist are the principal present activities that contribute to the solution of the important social hygiene problems of the county.

PRIVATE HEALTH ACTIVITIES AND RESOURCES

As in the case of public activities, fuller information upon private activities will be found in other parts of the report.

Nursing—The nurses employed by the Red Cross for community work and those employed by the Tuberculosis Association for general visiting and health education throughout the county have done some excellent pioneer work but are inadequate in numbers to meet the public health nursing needs of the county. The needs of the preschool child and the problems of infant welfare and of maternal care, are receiving little attention except in a very few communities. In most cases the following up of defects discovered in the schools is occasional if at all.

Children's Organizations—There are some interesting efforts at promoting the organization of children and their participation in the health movement throughout Erie County. Such slight work as the Girl Scout Organization of Buffalo has been able to do in stimulating troops outside of the city and what the full time county representative for the Boy Scouts is now doing, the Junior Extension work of the Farm Bureau, the efforts of the Erie County Sunday School Association, the promotion of children's organizations and activities through the parochial schools, and the health clubs in public schools (even though the last named are often superficial) are significant as indicating as yet undeveloped possibilities. The stimulation of initiative, responsibility, self-reliance, and community interest in the child through such organizations is one of the hopeful fields for the promotion of health and other civic interests.

Children's Aid—The Children's Aid and Society for the Prevention of Cruelty to Children is the principal private organization interesting itself in mental hygiene problems, as well as in the general health and welfare of children coming under its care from outside of the larger cities of the county. It is housed in a modern building in Buffalo where about six hundred children are admitted per year. Many of these are from rural parts of the county and practically all present problems in mental hygiene. This institution conducts a psychological

clinic which engages the full time services of a psychologist and to which are available the volunteer services of an experienced psychiatrist.

COORDINATION

With the possible exception of the need for a county health officer and health unit under his supervision, there is no more urgent need in Erie County than that for coordination of personnel, programs and efforts for the health of the children of the county.

An Illustration—A most encouraging example of the possibilities of such coordination is found in the instances in which the community nurse serves in reality as the local representative of the tuberculosis movement, working in the closest harmony with the tuberculosis nurses and the Tuberculosis League. An extension of this principle on a thoroughly cooperative basis would probably result from the efforts of a central nursing committee, as proposed in the nursing section of this report, and thus release the time of one or more nurses for concentrated efforts in some rural areas at present so much neglected. Lack of coordination and common planning in the work of individual nurses in Erie County in general is not a grave problem simply because the nurses are not able to cover the field sufficiently as it is. But there is already an evident need for planning together on the part of those who supervise these nurses.

Educational Supervision—One of the facts that impressed itself most strongly upon all observers of the schools was that various health efforts in the schools, while receiving stimulation and guidance from the Department of Education in Albany, lost much, if not most, of their possible effectiveness through lack of centralized local supervision. No one thoroughly familiar with the schools would contend that this special supervision should or could be given by the overdriven district superintendents with their already heavy administrative tasks.

The tendency to a multiplication of specialists who shall directly teach the pupils of a school or shall go into the home for service, is not so marked in the rural sections and villages of Erie County as in some larger centers of population. An example of a tendency in the opposite direction is found in the nursing cooperation mentioned above. In the schools the possibilities for coordination need careful attention. In the field of home economics, of physical education, and the general teaching of health habits, there is a marked need for greater concentration of the specially trained person upon helping and guiding the grade teacher and thus serving more pupils, more effectively, than is possible through acting as a special instructor.

The Helping Teacher (or Special Rural Supervisor)—The next logical step in simplifying and making more effective the various special programs, through correlation, is the development of more generalized helping teachers qualified in health subjects, as well as in other essentials of education, with the advisory specialists, such as the physical education and home economics teachers, assisting and working with these helping teachers rather than scattering their efforts over a large number of schools and principals with a decrease in effectiveness.

Such helping teachers, or special rural supervisors, to work under the administrative head of the schools, should be provided for sufficiently small districts in the county so that they may aid in the development of methods and in the teaching and correlation of various subjects, including health. If it is impossible for the entire county to be covered in this way, at least one such person should be appointed for a demonstration in a single district. If this cannot be done from public funds, it would be a most important contribution if private funds were furnished to show the possibilities of such a plan.

It seems probable that the state-wide studies now being made of rural education will result in a modification of the present county system of organization for educational purposes. Under any plan that is adopted provision should be made for a trained educational supervisor for the county who can give the necessary time and attention to stimulating and guiding the teaching of health, especially in correlation with other subjects in the schools, and to such general health educational activities as may be developed through cooperation between the schools and other community forces. Such a person should be well grounded in the elements of a complete health program as well as in educational subjects generally.

There are instances of cooperation between some of the forces interested in children's organizations such as that between the American Red Cross and the Girl Scouts in classes in swimming and life-saving, but the great possibilities for genuine team work and for coordination in this field largely remain to be realized.

Medical Examiners and Health Officers—One of the most important problems in coordination that exist in Erie County is found in the relationships between the work of the school medical examiners and health officers. In a large number of instances the school medical examiner is also a health officer. There should unquestionably be a more definite, constructive plan of coordination between these two types of work. Some suggestions for this are offered under the part of the report dealing with health officers and medical examiners.

A genuine coordination, not only among the ranks of the groups that have been mentioned, but among all of the forces interested in promoting health in Erie County, would constitute one of the most far-reaching forward steps that could be taken for the future welfare of its citizens.

Erie County has an exceptional opportunity for developing a program for saving the lives of mothers and infants and protecting and promoting the health of boys and girls of all ages as part of a general health plan. The work already done and the good will among the private organizations at present working in the county, the beginning in raising standards of official health work that has been made by the Sanitary Supervisor for this district, the good work of the superintendents of schools in arousing interest in the normal, wholesome development of school children, and the general interest of the County Board of Supervisors and public officials in promoting not only charitable but health and preventive work, are all positive assets. They give promise of great success if prevention is undertaken in a thoroughgoing way, with a real plan for centralization and team work.

RECOMMENDATIONS—Many suggestions are made in the subsequent sections of this report of ways in which the county's care of its children may be improved and built up. However, there are three problems which stand out above all others as of immediate importance if further progress is to be made. We make the following recommendations on these three points:

1. It is recommended that a county health council be formed, consisting of those public and private agencies with county-wide interests which stand ready to unite in the promotion of health throughout the rural sections of Erie County; also that this council employ a paid executive and clerical help from private funds, the executive to be selected by the entire council.

The agencies which joined in the invitation for an inquiry into conditions affecting the health of children of Erie County would form the natural nucleus for such a council, together with any others which are doing effective work in the health field, including the local health and school authorities.

Undoubtedly there would be formed committees dealing with special problems, such as committees on nursing, on coordination of the school health program, on mental health, and on children's organizations (to cover the Scout movement, health clubs, junior extension clubs, cooperation of Sunday schools, etcetera.) Other problems requiring attention by the Council might require the appointment of special committees at earlier or later dates as the occasion demanded,

such as the problems of the under school age child, of social hygiene, of nutrition and of recreation.

Such a county health council would naturally promote coordination in local efforts rather than the organization of numbers of separate community groups for special purposes. The Community Council organized at Clarence, in which representatives of the various local groups have united most effectively for promoting community interests is an excellent example of such local coordination, and is already taking up health problems. The Lanafore Club of Springville, while devoting itself more largely to business and engineering problems, affords striking example of the effective way in which a local group can promote community activities. The work of the various public and private agencies interested in health in Erie County would be greatly simplified if they would clear their assistance to local communities through common and effective local media, such as these two clubs.

2. It is recommended that the County Health Council draw up and present to the County Board of Supervisors a budget for county health work which shall be adequate to centralize this work and to make it genuinely effective for the county.

Such a budget has not been drafted as part of this report as it was felt that it should be done preferably by an active committee representing Eric County. It is believed that a whole-time county health officer, county advisory nurse, and director of medical work in the schools, who would naturally be included in such a budget, as of prime importance, would be powerful factors in developing a really strong and effective county health unit. The County Health Council would be the medium through which the private agencies would supplement, support and help build up the work of the officials.

Many counties in different parts of the country have demonstrated the tremendous strides forward which it is possible to take with whole-time service, not to supplant the efforts of local communities, but to guide and assist them. The present scattered and partly ineffective local health work throughout the county would rapidly begin to develop greater results if there were real organization and central planning and supervision behind it. Also a county health unit in charge of general health work or supervision of medical inspection in the schools or both could bring in other agencies at present not utilized. For instance, the almost total lack of mental examination of school children in the rural sections of Erie County exists within a short distance of the very excellent clinical facilities of the Buffalo State Hospital and the Gowanda State Hospital.

It is almost certain that in the course of a year or two, under a centralized health plan, the present neglect of problems of maternity, infancy and the pre-school age would be changed to a positive, progressive campaign for preservation of the coming generation of Erie County. The efforts of the county superintendents of schools, in the face of great handicaps, to arouse practical interest in health throughout the schools, would not, as at present, fall short of the development of health habits among many of the children if they could have trained assistance in this work instead of adding it to their many other duties.

It should be definitely recognized that, to be most effective, the work of a county health unit should be extended through administrative subdivisions, each of such a size that one man in it could adequately carry on such general epidemiological, sanitary and preventive measures as are needed to supplement the work of the local health officers.

3. It is recommended that the county health council and the public officials of Erie County use every effort to make it possible for the local school districts of the county to be enlarged through combinations on a basis that is sound and satisfactory.

The impossibility of doing the most effective work in districts containing only a few pupils, which cannot afford the things which they know to be needed and perhaps are taxed out of proportion to their means, needs to be recognized in justice to the citizens and the schools of those districts.

The enlargement of school districts under a plan that shall be satisfactory and not an imposition upon the people of the State is being studied by the Committee of 21. As a distinct contribution to health, those interested in the welfare of school children should support any sound proposals for legislation that will remove the grave handicaps of the present school district system.

III. THE UNDER SCHOOL AGE CHILD

While in many communities in which material progress has been made in the health program it is the child from 2 to 5, inclusive, who has not received adequate attention, it is true of Erie County outside of the large centers of population that the health of all children under the school age period, including infants, is one of the most vital problems demanding immediate consideration that is not being fully dealt with. The high infant mortality rate in certain sections of the county and the well known fact of development of defects under the school age which show an increasing tendency toward permanent physical impairment if neglected, are sufficient evidence of the need for early and intensive plans for this age group.

PRENATAL CARE—The relative improvement in health and reduction in deaths among children for whom there has been prenatal care has been strikingly shown by studies of work of the Maternity Center Association of New York, of the Instructive Visiting Nurses Association of Boston, and elsewhere. In Erie County an analysis of 876 of the 984 infant deaths in the rural parts of the county for 1915 to 1920 inclusive shows that 46 per cent. of these deaths were due to congenial debility, accidents at birth, congenital malformations and prematurity, this exceptionally high percentage furnishing a most eloquent plea for attention to prenatal care.

No organized prenatal work was found in the parts of the county studied. The community nurses, as they come in contact with expectant mothers, give advice, but this reaches only a very small fraction of those who could be thus benefited. According to physicians and health officers consulted, pregnant women report to their physicians in only a small percentage of cases. In one community where there were a large number of foreign-born the health officer stated that only about 10 per cent, of the mothers had obstretical care. The possibility of reduction of preventable deaths due to prenatal causes is a very hopeful one if there is increase of organized effort to that end. GENERAL INFANT MORTALITY—The average infant mortality rate for the part of Eric County studied, which is largely rural, was 90.5 for the period from 1915 to 1920, inclusive. The infant mortality rate for the same period for the rural part of New York State was 84 and for the whole of the state including its largest centers was only 92. figures show the great importance of the infant welfare problem in this section.

Several townships and villages stand out prominently as having a high infant mortality rate covering the six-year period, especially Cheektowaga township and the villages of Depew (with a rate of 134.6), and Sloan (129.9) within this township. Undoubtedly these high rates are due to a great extent to the large foreign and industrial population. There are also in Cheektowaga township a number of children under institutional care.

Springville had an infant mortality rate of 105.8, and Hamburg a rate of 113.4; Lancaster township, exclusive of Lancaster village, a rate of 123.6, and Tonawanda township, exclusive of Tonawanda City and Kenmore village, a rate of 120.9.

During the six years there were 984 deaths of infants under 1 year of age. Of this number 876 deaths were classified according to the cause of death. Nineteen per cent were due to respiratory diseases: 28 per cent. to gastric and intestinal diseases; 46 per cent. to con-

genital debility, accidents at births, or congenital maiformations or pre-maturity; 2 per cent. to communicable diseases, and 5 per cent. to all other causes. There were 9 deaths from tuberculous meningitis and 3 from syphilis.

BIRTH RATE—The area studied has a general birth rate of 20.3 and is below the average for the state in 1920, which was 22.5, but higher than that for the rural part of the state, which was 18.7. As might be expected the birth rates are high in the townships where the foreign population is large as Cheektowaga, Concord, Blasdell village, Angola and Farnham.

Infant and Preschool Consultations—Throughout the county there were during the past year only six consultation centers for under school age children.

- (1) A consultation for demonstration purposes was held once a month at Hamburg village by the Red Cross, but there was no nursing follow-up.
- (2) A weekly consultation was held at Kenmore in the Y. M. C. A. Building, with an average attendance of 25. A half day a week follow-up work was given by the Riverside nurse.
- (3) A consultation was held at Riverside in the high school, with a small attendance. The follow-up work was done by the community nurse.
- (4) Williamsville held a consultation once in two weeks, which had a very small attendance. A community nurse did the follow-up.
- (5) The town of Lancaster held a weekly clinic which had a small attendance, and the follow-up work was done by the community nurse.
- (6) A consultation was held in Akron which was discontinued.

There are on an average, 1,800 births a year in the rural part of Erie County. Using the life table to determine the number of children living at each of the ages up to 5 on the basis of 1,800 births a year, there are found to be approximately 8,000 children of pre-school age in the county. Probably not many more than 100 of these were reached by the pre-school consultations described above.

The health centers in Buffalo which have clinics for infants and small children do not accept cases from outside the city limits.

There were several itinerant consultations conducted by the State Board of Health in several sections of Erie County last year. These were in Akron, Williamsville, and East Aurora. In all, 406 children were examined, of which 112 were under two years of age, 262 between 2 and 6, and 32 of school age. None of these had been examined before. Only 64 of the total number were found to have no defects. The others had 1, 2, 3, 4, 5 or more defects. Only 16 were recommended for hygienic correction. The remaining 316 were recommended as in need of medical observation and care.

Although the mortality for the pre-school group (2 to 5 years of age) is relatively low as compared to that of infants, the damage rate, due to prevalence of contagious diseases and neglect in correcting defects, is excessively high and is reflected in the mortality and morbidity of later years.

From the high mortality due to congenital defects, accidents at birth, and prematurity it is obvious that there is an important problem of obstetrics. There should be an excellent opportunity for a committee of pediatricians and obstetricians to cooperate with the Erie County health council and any committees active in chitd health problems through helping to improve standards of obstetrical work and through increasing the use of educational and clinical facilities by those in charge of consultation centers and the medical profession generally.

RECOMMENDATIONS

Every physician, nurse and nutrition worker of Erie County who serves the smaller cities and towns, as well as every health officer and the medical examiners of school children, are potential allies who can be organized effectively for a thorough program for consultations for the pre-school child and for follow-up in the home, with advice to parents on feeding, health habits, the correction of defects, and the prevention of communicable diseases.

1. It is recommended that the Erie County health council shall proceed at once to organize a definite program for health of the under school age child, including consultation centers throughout the county and the promotion of this work through all the existing health resources.

Not only could the present consultation centers be materially strengthened but they could be increased four or five times in number and still no more than adequately serve the needs of the county.

2. It is recommended that the health council create a special committee on the under school age child, which shall see that this program is modified to meet new conditions as they arise and that it is being followed actively.

The pediatric and obstetrical departments of the Buffalo Medical School and the City Health Department would undoubtedly cooperate

heartily with such a committee and help in arranging for consultation service where it is desired. The Buffalo Foundation, with its facilities for study, research and standardization should also be a material help, in addition to the State Sanitary Supervisor and Supervising Nurse for the district, the American Red Cross and the Buffalo Tuberculosis Association, all of which are vitally interested in such a program for the under school age child and are promoting work along this line as far as possible under present conditions.

3. It is recommended that those interested in the health of the child under school age in Eric County proceed at once to confer with the Child Hygicne Division of the State Department of Health, as to the possibility of an intensive child hygiene campaign in Eric County, in which full advantage may be taken of the facilities which will be available to the state.

IV. MEDICAL SCHOOL INSPECTION

A state law requires that every school child shall be examined by a physician once each year and that the school authorities shall employ a physician for this purpose. If a certificate of examination of a child from a practicing physician in good standing is offered the authorities it must be accepted by them in place of an examination by the school examiner.

Purpose

The purpose of these examinations is to obtain a clear picture of the condition of the child from the physical and mental standpoint, to reveal any defects which he may have and their relation to his physical and mental activities, to indicate definitely such corrections of defects as should be made, and in general to serve as a guide for the teacher, the physician, the nurse, and especially the parent, in raising the standard of the child's health.

The examinations of school children, while valuable, have fallen short of this ideal in many respects.

Wide Variation in Examinations

Inquiry revealed a great variety in the character of these examinations.

Time—In one school the teacher reported that the physician had examined 30 children in 45 minutes and even briefer times of examinations were quoted from other schools. In another school it was stated that the physician had examined 14 children in 1½ hours.

Standards—The standards of examinations also have shown great discrepancies and few of them have been thorough. Although most of the physicians appreciated the need of removing the clothing to

the waist in order to secure a proper examination of the heart and lungs it is rarely done, and one examiner objected to doing it on the grounds that he could hear through a brick wall with his phinetescope. One physician gave as a reason for inadequate examinations the lack of proper examining rooms, although in the largest school in his district he had used the teachers' rest room for examining the children. Another physician stated that he went to the children's homes for more thorough chest examinations in cases with suspicious symptoms.

While most of the defects recorded are tonsil and adenoid conditions, defective vision and carious teeth there is a great variety in the relative numbers of these defects found in different schools in the same year and also in all the districts from one year to another. This would indicate a marked difference in the character of the examinations as it can scarcely be accounted for on any other ground. It is probably due not only to differences in diagnostic methods but also to the fact that in many communities the examining physician is changed frequently. Defects indicating malnutrition were recorded in only a small percentage of cases prior to the special weighing and measuring campaign during 1920-1921, when a higher percentage of the children under weight was found.

Employment and Pay-In two instances physicians stated that they did not receive enough pay to justify a better examination. One of these physicians was paid 75 cents per child and the other 50 cents. The latter stated that he spent about five minutes on each child. one village all the physicians and one osteopath were paid \$1.00 per child by the school authorities. None of the examinations in this village were made in the schoolroom. In one village the health officer stated that he wished to persuade the school board to make a similar arrangement, as he did not wish to give the inspection work to a rival physician and believed that he would be criticised for employing himself because he was a member of the board of education. In this village no examination records were found in the schools of a date later than 1917. The health officer claimed that he had examined the children free of charge in order to escape criticism. Among 14 physicians 5 were paid 75 cents per child, 5 were paid 50 cents per child, 3 were paid \$1.00 per child, and one was paid 25 cents per child. ports were received of exceptional cases in which the pay ranged upward from 10 or 15 cents per child.

LACK OF SUPERVISION OF SELECTION AND WORK

It is clear from the facts that there is no adequate supervision of the selection of these physicians and that the type of work done by

them could be vastly improved if there were centralized supervision nearer at hand than Albany. This absence of an effective force for securing desirable standards for school medical examinations is obviously the chief reason for most of the hasty and ineffective work done by the examiners.

LACK OF CONFIDENCE IN THE EXAMINATIONS

Much dissatisfaction was expressed by teachers and others with the character of the medical examinations. In some instances it was definitely claimed that corrections of physical defects were neglected by the parents because they did not have faith in the quality of the examination. In a few instances teachers stated that the examiner had reported children as having normal teeth, while observation by the teacher had shown several badly decayed teeth.

One of the most effective methods of securing confidence in medical examinations is to have the parents present during the examinations to observe the methods by which they are made and have the findings explained to them so that they will have a real basis of understanding upon which to make their efforts for correction. No school was found where the parents had been present at the time of the examinations of children and in the majority of cases no invitation had been issued to them to be present.

Examinations of Real Value

Through the courtesy of the State Medical Inspector of Schools it has been possible to compare the tabulated records of the examinations for the five school districts covered in this inquiry during the past five years. These tables show a net increase in the total number of children examined yearly during this period and a percentage of these having defects treated which, while low, is nevertheless worth while.

The fact that in 1920-1921 out of 11,218 defects found 2,963, or about 26 per cent. were "treated" is an indication that this work is producing results of real value even though the examinations are in many cases superficial and the follow-up work is often lacking.

FOLLOW-UP OF PHYSICAL EXAMINATIONS

The most effective method of correcting the defects discovered through medical examinations combines, first, a stimulation of the individual child's personal interest in securing such correction in a way that does not stigmatize him as defective, and, second, a follow-up visit in the home to stimulate parental action, the latter being properly part of the work of the school nurse.

The usual practice is to send the report of the physical examination, in case there is a physical defect, to the parents, in order that the child may be taken to the family physician. This report is, as a rule, in the smaller schools sent by the teacher. The records are usually kept in each class room and a report is sent to the Division of Medical School Inspection of the State Department of Education. Where a nurse is employed the follow-up is done by her. In a few schools the health officer has taken a real interest in obtaining these corrections and visited the parents during his rounds of practice. In two townships where this method was especially effective the health officer was the only practicing physician in the township. Where there has been the usual competition the physicians have been more reluctant to do follow-up work. In some instances, where there have been no school nurses, the physical training teachers have shown a commendatory interest and have been fairly effective in obtaining corrections. In some cases they have even visited the homes, but they usually depend upon talks with the children. In a very few instances the teacher visited the parents and persuaded them to make corrections. Because of the general lack of adequate nursing follow-up in the schools the interest of the parents too often depends largely upon a formal notice to the This means that in the great majority of cases the value of the medical examination is wholly or partly lost. This condition can only be remedied by a county-wide plan for public health nursing, including school nursing, such as proposed in the nursing section of this report.

FACILITIES FOR CORRECTIONS

Much of the surgical work that has resulted from the medical examinations has been done in Buffalo. A few of the rural physicians have done tonsil operations but most of them have preferred to send their patients to Buffalo hospitals or specialists. One school medical examiner reported that tonsil operations were done by one of the hospitals in Buffalo for \$6.00, and that the school nurse had taken as many as 40 children for such operations. A high percentage of cases of eye defects which were treated were referred to Buffalo oculists or clinics. There is no consistent plan for securing correction of these defects because of the lack of central planning and supervision of this work. In indigent cases, except where the public health nurse has exerted her influence, children needing glasses have not, as a rule, received attention. One child, boarded out by the county, was found who could not afford glasses and although the school examiner had recommended them and the teacher realized the importance of the need

the matter was not followed through in such a way that glasses were secured.

Except in a few communities where the local dentists and the public health nurse had done enough educational work to result in a fairly large number of children having fillings made in their first teeth, there was very general failure to secure proper correction of dental defects. Too often the physicians or dentists have recommended that severely decayed first teeth be retained in order to prevent malformations, without advice as to the proper treatment that would prevent serious results from the presence of the untreated teeth. Unfortunately in a number of townships there were no dentists available and here again no organized effort was evident to bring facilities for dental correction to the children or the children to them.

Coordination Between Medical Examinations and General

HEALTH WORK

A large number of medical examiners are also health officers. In the districts of 19 health officers surveyed by the District Sanitary Supervisor it was found that 57 per cent. of the school districts in the areas under the health officers' jurisdiction were also covered by them as medical examiners. On the other hand, there is little if any genuine coordination between these two types of work. Undoubtedly a great deal of improvement in health work generally would result from such coordination. While this is a problem that is being discussed and will be dealt with on a state-wide basis it may not be amiss, in the recommendations to follow, to suggest certain principles which seem sound in dealing with it in any locality.

RECOMMENDATIONS

- 1. It is recommended that coordination between medical examinations and general health work in local communities should conform to the following principles:
 - (a) The administration of medical work in the schools, especially in rural areas and small communities, should be under one administrative control.
 - (b) The jurisdiction of neither the school authorities nor of the health authorities of the county should be relinquished but both should be administered through one administrative head, whether on the pay roll of the schools or of the nearest health administration unit.
 - (c) There should be definite written agreement in advance, subscribed to by both the schools and the health authorities, outlining the scope and jurisdiction of medical work in the schools.
- 2. It is recommended that there be some method of check upon the selection and pay of school examiners through the state authorities or preferably through a county representative in charge of this type of work.

Such a check would greatly add to the effectiveness of the work of the examiners, particularly in those cases where the examiner is doing satisfactory work but is likely to be changed at the whim or political preference of the school trustee, or perhaps because he is unwilling to accept a fee that is inadequate for good work. It should set some reasonable minimum for pay for thorough examination.

Such a check would also probably result in eliminating the indiscriminate handling of examinations by physicians in their offices, as it was noted in one community.

3. It is recommended that there be central county supervision not only of the selection but of the work of the school medical examiners.

The improvement in the methods of communicable disease control through the limited state supervision of health officers by the State Department of Health and its representatives, through health officer conferences and schools, etcetera, suggest ways in which standards of local school work could be improved through such supervision.

Conferences, demonstrations and pediatric clinics, through the cooperation of the Buffalo Medical School and the County Medical Society, could be used for interesting and stimulating the local physicians in improving methods and setting higher standards. This supervision and educational work could be most economically administered through a county health unit or department of health, in cooperation with the educational authorities. In a number of cases where the local examiner is also the health officer, such a plan would be particularly satisfactory not only in avoiding the building up of a separate system of supervision, but because it would fit in with the precedent already established for supervising work of these men through the sanitary supervisor.

The fullest cooperation of the local physicians is essential and the County Medical Society should be of the greatest help in planning for and carrying out any measures for raising the standards of school medical examinations and follow-up work.

4. It is recommended that facilities be provided in the schools, as far as possible, for utilizing the time of the medical examiner to the fullest advantage through clerical service, proper equipment and examining room.

The value of the school nurse or other trained health worker in weighing and measuring of children, taking preliminary records, and doing such type of inspection work as has been approved by the physicians, has been demonstrated wherever tried. The provision in schools of satisfactory rooms for examinations probably will depend

too often upon some satisfactory basis for combination of school districts and eventually the elimination of the one room, one teacher school building.

V. MEDICAL SERVICE

The practicing physicians are fairly well distributed over the county. There is probably no community with a serious lack of medical service. Nearly every part of the county is not far from excellent automobile roads. In the territory covered by the 19 health officers questioned by the state sanitary supervisor there was, on the average, one physician for every 1,360 inhabitants, while for the whole county, including Buffalo, there is about one physician for every 700 inhabitants. The State Medical Society reports that there are 80 physicians in Eric County outside of Buffalo, Lackawanna and Tonawanda. This would mean an average of approximately one physician for 1,300 inhabitants.

Of the physicians of Erie County 85 per cent. are graduates of the Buffalo Medical School, but those in the rural areas are not receiving the clinical advantages, opportunities for consultation and contacts with the most progressive medical developments that come to their fellow-practitioners in Buffalo. It is vital to the whole problem of child health that it shall be supported by the members of the medical profession and that they shall guide its medical aspects. The busy practitioners in the smaller communities should, just as far as possible, have the advantages of the best pediatric experience. Some experiments in graduate extension work for physicians have been tried by the faculty of the medical school. The medical school clinics and hospitals of Buffalo offer unusual opportunities for extension work for the benefit of medical service throughout the county. Graduate courses adapted to the needs of the rural physicians, conducted during the summer or for short periods on one or two days a week might result in the attendance of a number of physicians. Clinics, under the County Medical Society, throughout the county should develop a wide use of such service by the physicians in the smaller communities.

It is recommended that the County Medical Society and the Buffalo Medical School give especial attention to the possibilities of graduate extension service in pediatrics and other branches of medicine for the henefit of the physicians of the smaller communities of Erie County.

VI. NURSING IN RELATION TO THE CHILD

It is an accepted fact that the development of our nation depends very materially upon the care given our children today. Also there are very few that will dispute the statement that one of the most powerful factors in conserving and promoting child health is the public health nurse.

The nursing problem of Eric County is not radically different from that of many other counties in the country. It is widely different in different parts of the county (outside of Buffalo, Lancaster, Lackawanna, Tonawanda and Gowanda). In many sections of the county there is an urgent, almost pathetic need for even the most casual sort of public health nursing.

THE PROBLEM

A crude but striking indication of the need for more attention to nursing in Eric County will be found in the infant death rates and tuberculosis death rates cited in the summary at the beginning of this report.

No more striking illustration of the need for nurses could be given than the figures of the State Department of Educaion, showing thousands of defects discovered among school children as to which no corrections are reported. It is a well known fact that the follow-up visit of the school nurse is the most effective method of securing the correction of such defects, supplementing the work of the teacher with the individual child. The vital part that the public health nurse plays in the organization and building up of child consultation clinics and in supplementing the work of the private physician, the health officer and the school medical examiner generally is too well known to need discussion here.

As an indication of the children's problem, which demands increased nursing service in Erie County it should be noted that there are over 19,000 children registered in the public and parochial elementary schools in Erie County in the five school districts touched in this inquiry. There were 1903 births during 1920 in the area studied and 147 infant deaths, indicating an immediate need for special consideration of an infant and maternal welfare program.

COMMUNITY NURSES—There are four general community nurses outside of those larger centers which were not included in this inquiry, one employed by each of the following villages: Williamsville, Akron and Kenmore, in addition to the one employed by the Red Cross in East Aurora.

This work cannot be praised too highly as pioneer work paving the way for a complete public health program in one of the most effective possible ways. In some instances it is fairly intensive, as public health nursing goes with the present shortage of nurses, but every one of these community nurses feels inadequate to meet the full problem. With practically all of the nursing problems of the community on their shoulders they have only been able to give prenatal advice in a small percentage of cases in their territories, without attempting intensive effort along this line. A hopeful beginning is being made in several communities in the development of infant consultations but the pre-school problem is receiving only incidental attention, if any.

AMERICAN RED CROSS NURSING SERVICE—The commonly accepted concept of the functions of a voluntary organization, which is that it shall develop and prove the value of worthwhile activities, has been followed by the Red Cross nursing service in Erie County. Community nursing service is first demonstrated and promoted by the Red Cross Chapter and with the relinquishing of their nurses to the community, new educational programs are developed. In conjunction with the giving of bedside care, nurses have given health talks in the schools, public and parochial; have held clinics; have initiated Little Mothers' Leagues, and have taught home hygiene classes. One especially important piece of work has been the holding of such classes in the Normal School as a part of the regular training course for teachers.

TUBERCULOSIS NURSES-Three nurses and one supervisor employed by the Buffalo Tuberculosis Association visit all parts of the county, concentrating especially upon tuberculosis problems, but rendering any assistance that they feel is required where there is no one else meeting the need. It is primarily upon these nurses that the responsibility falls for following up the tuberculous cases reported and patients discharged from the sanitorium, as well as arranging for admittance to the sanitorium. In two or three instances the community nurse is very largely assuming this responsibility, working closely with the tuberculosis nurse as the specialist in that field, and undoubtedly this sort of cooperation can be considerably extended. In addition, the nurses have promoted an educational campaign from the point of view of prevention of tuberculosis, giving this subject an emphasis which otherwise it would not have had. The work of these nurses has been facilitated by the use of two automobiles, enabling them to cover a much wider area than otherwise would have been possible.

Schools—All of the community nurses and tuberculosis nurses hold themselves ready to assist the schools as far as possible in view of their other duties. The attention that the nurses are able to give to the schools varies a great deal. Some of them make inspections of the pupils, especially in the villages where there are community nurses,

some assist the physician with his inspections, and they all, so far as their duties permit, attempt to follow up children living in the territories covered by them whom they know to have defects. Also they stand ready to assist the schools and the teachers, so far as they have time to do so, in teaching health habits and in giving talks to the pupils.

As a rule each nurse visits the village schools in the area covered by her but is able to visit the rural schools infrequently if at all. The school nursing problem in the village is not usually being handled adequately, even where the most intensive community nursing is being carried on, and nursing assistance and follow-up work for the rural schools are wholly inadequate. It is easy to understand why so large a percentage of defects are not corrected and why there is such an insistent desire on the part of the school officials and teachers generally for real nursing help.

There are three "health teachers" located in three high schools under the new classification adopted by the State Department of Education whereby school nurses have qualified as health teachers and taken charge of physical education work and other activities in the schools. The broadening of the educational duties of these nurses in the school buildings appears to tend to diminish, if not to eliminate, their home visiting. In view of the general need for more rather than less follow-up work in the home, this subject merits the careful consideration of the educational authorities.

ADEQUACY OF NUMBER OF NURSES IN GENERAL

In Erie County in the area included in this nursing study there was a population in 1920 of 91,906 served by 11 public health nurses. This gives a rate of one nurse to 8,355 people. Authoritative standards as to the desirable number of nurses for adequate attention to public health problems, including that of the child, require one nurse to every 2,000 population, which indicates a demand for 46 nurses in this area of Erie County. Even at the rate of one to every 3,000 there would be 31 nurses required—an increase of 20 over the present number.

There are three pertinent reasons why twenty additional nurses cannot be placed at once in the field.

(1) Communities have not a full appreciation of the need for such an adequate public health nursing service, and it is always a sound policy to see that there is a community understanding and a desire for progressive health administration before proceeding too rapidly to add new services.

(2) At present funds are not available, which is of minor consideration, for when a desire for health is intense and real, funds will be available for the development of preventive measures even more than for the enlargement of curative organizations.

(3) A sufficient number of properly trained public health nurses

is not available.

There should be no question, however, that all interested in public health in Eric County should work consistently and continuously for an increase in the number of public health nurses throughout the county as well as for coordination of the work that is done now, to be under the auspices of a county health council which would greatly stimulate local work. Also in doing this the effort should be made in every instance to see that an automobile and its maintenance is provided for, as only two of the general nurses and two of the tuberculosis nurses have cars, which means that the rural communities are very largely neglected and the work that is done is greatly hampered.

Supervision—The following is a list of nurses who have some supervisory duties in Erie County:

(1) State Department of Education: Headquarters in Albany, N. Y.

(a) Director of nurses, supervisor of all nurses employed by Boards of Education.

(2) State Department of Health: Headquarters in Albany, N. Y.

(a) Director of nurses, assisted by 14 special supervisors of county work, 8 after care of poliomyelitis nurses, and 9 nurses who are assigned to Special Divisions of the State Department of Health.

(b) One of the 14 special nursing supervisors mentioned above has headquarters in Buffalo, Rochester and Jamestown; she reports to two Sanitary District Supervisors; there are five counties, including Erie, under her supervision in one district alone.

(3) American Red Cross: Divisional Headquarters, New York

City.

(a) Two State Supervisors of Nurses, one of whom has supervision of Erie County.

(4) State Charities Aid Association—Tuberculosis Committee:

Headquarters, New York City.

(a) One Director of Nurses, who serves Erie County through the Chief Nurse of the Buffalo Tuberculosis Association.

COORDINATION—A hearty spirit of cooperation exists between the various nurses in Erie County with few exceptions. There has been exchange of service in several instances, such as in the weighing and measuring campaign promoted by the Junior Red Cross and assisted by the tuberculosis nurses and others, in some instances of medical examinations and in the reference of patients to agencies best able to help them.

Actual coordination of efforts is well developed, in one or two instances where the community nurse is carrying on the tuberculosis program in contact with the Tuberculosis League. It cannot be said that there is any serious lack of coordination, simply because the demand for nurses throughout the county so far exceeds the supply that each has a field which is little touched, if at all, by the others. Undoubtedly, however, the desirable relationships between the tuberculosis nurses and the community nurses can be extended throughout the county to the advantage of all concerned.

Even more important would be the meeting of the supervisors and of individual nurses of the county for common planning, adjustment of program, and the more general promotion of the special interests of each. Through such common conference and planning a constructive maternal and infancy welfare program would probably receive far greater relative attention than it has in the past; also probably a well-adjusted school nursing program would be evolved. It is conceivable also that with the development of closer coordination between the work of the tuberculosis nurses and the community nurses, some of the former might be released for more intensive general public health nursing, including both children's work and tuberculosis work, in some of the rural areas which at present are receiving relatively little attention.

RECOMMENDATIONS

- 1. It is recommended that a conference be called of all of the nurses in the county with the object of studying individual plans of nursing service and common nursing problems which have not been met.
- 2. It is recommended that as a result of such a study a definite program of nursing service for the county be outlined which shall provide, so far as possible, for concentration on a complete nursing program for each community and eliminate duplication of effort to the greatest extent.
- 3. It is recommended that as a natural corollary of such conferences and common planning joint consideration of the resulting plans be given by the county supervisors and divisional supervisors of national organizations and state departments, with a view to facilitating such coordination further.
- 4. It is recommended that as a most important next step there be formed a permanent central nursing committee of Eric County composed of representative nurses and lay people from each group actively promoting nursing work, public and private, throughout the county, which should be a committee of the county public health council. Some of the functions of such a committee might be to arrive at the best standards for work, for uniforms, records, equipment, salaries, etcetera, to take an active interest in recruiting student nurses, and to keep the nursing program and activities up to date to meet changing conditions.

5. It is recommended that every effort be made by the Erie County Health Council, and any nursing committee that may be formed, to secure, at as early a date as possible, a county advisory nurse and more public health nurses for work throughout the rural sections and villages of the county.

VII. HEALTH TEACHING IN THE SCHOOLS

"The worth of any educational process is to be measured by its product. Health teaching in the school is successful to the degree that it conserves and promotes the health of the child." The mere acquisition of facts on hygiene and physiology, no matter how important those facts may be, is worthless unless the learning leads to expression in hygienic habits of living, and a consciousness in the child of health as giving mental and physical strength and increase in the joy of life.

The old methods of teaching physiology and hygiene from text-books have not been successful when measured by this standard. The facts learned have not been sufficiently related to the life of the individual child. A child may be told about certain health habits, but habits are not acquired in that way. If the child is actually to make that habit his own, his interest must be aroused and the formation of that habit must be secured by constant repetition associated in some degree with pleasure. Horace Mann has said, "Habit is a cable—we must weave a thread of it every day until it becomes so strong we cannot break it."

Therefore, if health teaching is to be successful in promoting the health of the individual child, the following points are essential:

- 1. The interest of the child must be aroused and sustained.
- 2. The essential health habits should be stressed and action on the part of the child secured.
- 3. There must be continuous opportunity for practicing the health habits over a considerable period of time.
- 4. The approach should be made always from the positive point of view in order that the child may gain a positive ideal of health.

A school health program by which such health teaching can be made most effective should include:

A thorough physical examination for every child on entering school with the correction of remediable defects.

A definite amount of time assigned in the curriculum for health inspection and instruction, including

(a) Regular weighing and measuring.

(b) The teaching of essential health habits which should be supplemented by the correlation of health teaching with that of other subjects in the curriculum.

A definite time for physical exercise and play in every grade. Special attention for malnourished children.

A hot mid-day lunch, especially for those who cannot get such a lunch at home, with the full use of the educational opportunities which it offers.

Special provision for children with physical defects—eye, ear, etcetera.

School buildings, equipment and surroundings of such character as to promote healthful living.

The Weighing and Measuring of Pupils in the Schools—The questionnaires returned by teachers in 228 schools show that about 57 per cent of the schools have been equipped with scales. This is a big step forward in the development of the health program and has been made possible largely through the interest of the Junior Red Cross. Although the majority of the teachers have still to learn how to use this equipment effectively, the beginning has been made and the direct challenge of the scale and its records is bringing home to many teachers the necessity for vitalized health teaching. Fifty-five per cent of the schools returning questionnaires report that the children are weighed each month and in about 50 per cent of the schools where pupils are weighed, the interest of the parents is stimulated by sending the weight record home. In District No. 5, the Superintendent has made provision for the reporting of the weight on the regular monthly home record card.

In the small schools the weighing is done by the teacher, but in larger schools where there is a physical director or nurse there is a tendency to take this part of the program out of the hands of the grade teacher.

In one school where the weighing and measuring was done by the school nurse, there was one scale and one nurse and 899 pupils. The school nurse would not be able to do anything else if she were to weigh each child each month, securing that personal contact with the child and the child's way of living which the monthly weighing affords. The teacher, on the other hand, who is in daily and hourly contact with the same child could supervise the weighing under the direction of the nurse and make the desired contact.

FORMAL LESSONS IN HYGIENE AND PHYSIOLOGY—Answers to the questionnaires show that in 228 schools in the county formal lessons on hygiene from text-books are given in

50 per cent of the schools in Grade 1 49 per cent of the schools in Grade 2 62 per cent of the schools in Grade 3 73 per cent of the schools in Grade 4 78 per cent of the schools in Grade 5 78 per cent of the schools in Grade 6 78 per cent of the schools in Grade 7 64 per cent of the schools in Grade 8

In addition, a fraction of 1 per cent stated that such lessons were given but did not specify the grades taught.

The time spent on these text-book lessons, although not always specified, showed a range from 5 minutes a week to 5 hours a week.

The amount of time given in most of the schools, however, lay between one-half an hour and one hour a week. It was interesting to note that for Grades 1-3 one-half hour was the time most generally allotted, and for grades 4-8 one hour was more general.

The questionnaires did not show the distribution of this time in the curriculum but in the schools visited the teachers stated that hygiene and physiology were taught about three times a week.

Textbooks Used in Grades in Schools Visited. (For complete list of text-books according to returns from teachers' questionnaires, see Addendum in original report, not printed here).

Davison's Health Lessons, Books I and II, American Book Co. (most general, copyrighted 1910).

Overton's Physiology.

Winslow's Healthful Living.

Use of Imaginative Supplementary Literature—"Clean Peter and the Children of Grubbylea," Longmans, Green & Co., publishers, was used in one school in connection with the first and second grade work and the teacher stated she had found it more productive of results in encouraging habits of cleanliness than any health lesson she had been able to find. This was the only school visited where the use of imaginative suplementary literature was found.

RECITATION BASED ON TEXTBOOKS—One ten-minute hygiene lesson for fourth and fifth grades in a one-room school was observed.

The subject of milk and all of the possible ways by which milk may become contaminated were discussed. The children stated "that if the windows are unscreened flies may reach the milk and then it becomes poison." Each child in reciting used the word "poison" in connection with milk and there was little reference to the value of milk as a food, no effort to discover how many children were drinking milk and no attempt to interest those who were not drinking milk, in the habit. In fact, the lesson tended to discourage milk drinking because of the constant association in the child's mind of milk with the word poison.

The text-book used was examined and it was found that the chapter heading was "Milk may be a food or poison." The introductory

sentence stated "Milk is the most perfect food known" and yet twothirds of the text is devoted to "when milk is poison" and there is one paragraph on "Milk as a food." This was only one class but the same text-book is used in 140 schools in Erie County and probably the average teacher in teaching from text would naturally stress the points stressed in the book. Too large a part of the health teaching in the grade schools in Erie County is confined to text-book lessons. This situation, however, is one which exists largely through the entire country and is in no way peculiar to Erie County.

HIGH SCHOOLS—The biology course given in the high schools contains a 12-week course in hygiene. The State Syllabus is followed very closely. About I week is spent on diet, and another on sanitation. Sanitation and the composition of foods are also touched on in the chemistry course but this latter is an elective course and so does not reach all the pupils. The average student takes this course in the first year of high school.

High School Textbooks—(For complete list of textbooks according to return from teachers' questionnaires, see addendum to original report, not printed here.)

Practical Biology, Smallwood, Revelly and Valey.

Biology for High School, Smallwood, Revelly and Valey.

Civic Biology, Dr. W. Hunter.

It was not possible to observe the class-work in hygiene in the high schools as that section of the course had not yet been reached.

HEALTH TALKS BASED UPON TEXTBOOKS—Health talks are generally given to the lower grades to emphasize health habits. The majority of teachers questioned in regard to these talks were rather vague as to the method and content; and a general impression was received that with every good intention of having these talks they were often sacrificed in the overcrowded curriculum or were reduced to a very few minutes once or twice a week, when the teacher gave the class or classes (sometimes all eight together) a rather formal summary of text-book facts.

CORRELATION OF HEALTH TEACHING WITH OTHER SUBJECTS IN THE SCHOOL CURRICULUM—An attempt was made through the teachers' questionnaires to find the number of schools where health teaching was being correlated with the teaching of other subjects in the curriculum. It was impossible, however, to draw any satisfactory conclusion on this point as the answers of the teachers indicated that the question was not understood by a great number. The general impression re-

ceived, however, was that as a group the teachers did not realize the many opportunities for such teaching which other subjects present. Personal observation in the 28 schools visited substantiated this impression as in the majority of cases the suggestion of such possibilities came to the teacher as a brand new idea.

In a few cases, however, teachers were correlating health with such subjects as spelling and English composition and in one school health plays were given. Only one teacher in the questionnaire group suggested that health posters were made and in only three schools visited were there indication of such work.

From the large percentage of schools stating that formal classes in hygiene and physiology are given and from the vagueness of the answers in regard to correlation of health with other subjects, it is probably safe to conclude that the teachers, as a whole, do not yet appreciate the richness of the opportunities for health teaching which such correlation offers. When the teachers do realize this it will greatly assist in solving that problem of "not sufficient time" which confronts every rural school teacher.

THE TEACHING OF HEALTH HABITS IN THE GRADES THROUGH PUPIL HEALTH CLUB ORGANIZATIONS—The general plan for the Health Clubs is furnished by the Physical Education Department of the State of New York but the actual details and arrangements are in the hands of the individual teacher. The use of these Health Clubs is recommended but not required. Teachers' questionnaires show that 42 per cent of the schools answering have health clubs. In 10 of the 28 schools personally visited the Health Club was being conducted. The general outline as furnished the teachers calls for the enrollment of all the pupils into the Health Club. The duration of time covered varies from a few weeks to the entire school year. The teacher selects certain health habits which for the most part cover those habits relating to cleanliness and personal appearance, exercise and fresh air. Some teachers also included food habits and habits of rest but this was by no means general. Each morning the roll is called either by the teacher or a pupil secretary and each child responds with his record for the previous day. Too often in order to save time the child is allowed to state only those rules he has not kept, as in the following instances:

The Secretary: "Johnny Burns."

Johnny: "I did not sleep with my window open;
I did not brush my teeth this morning."

The Secretary: "Sallie Johnson."

Sallie: "I did not go to bed before eight; I did not sleep with my window up; I did not drink milk."

The Secretary: "Bobby Jones."

Bobby: "Perfect."

This negative method of conducting the club is obviously bad. Other teachers, noticeably those who had received more training in educational methods, gave the daily checking of habits more time and the children stated those habits which had been observed.

The habits were in almost every case 6 in number and each habit scored 2 points, making a possible total of 12 points a day. These records were in many cases stowed away in the teacher's desk in a blank-book; in a few rare cases the Health Club records had a place of honor on the wall and perfect records received a star. In no school visited was there any encouragement of group competition observable. It was an individual record.

One teacher sent on the questionnaire a very interesting description of a health club entitled "What I owe myself and the other fellow." One month the club keeps individual records and the next month the scoring is by teams. This variation serves to assist in sustaining interest and at the same time it stimulates a group spirit.

Value of These Health Clubs—The value of these clubs in securing results lies in the hands of the teacher. If the teacher was interested and enthusiastic, bending her energies to infuse vitality into the conduct of the club, it was observed that the children were really benefitting. On the other hand, where the conduct of the club was a purely perfunctory matter on the part of the teacher, it was also an unimportant factor in the life of the child and there was little effort to obey the club rules.

One feature of the Health Club was the subject of much criticism on the part of the teachers, namely, the fact that the checking depended upon the word of the child. A number of teachers felt that this method offered a tremendous temptation to the child to be untruthful, and a few teachers stated they declined to organize Health Clubs for this reason. On the other hand, a large percentage of the teachers seemed to think that the children were very honest in their reports and that where any child made a false claim, public opinion in the school room was quick to correct the fault.

PHYSICAL EXERCISE AND PLAY IN THE SCHOOLS—In only 10 schools out of the 228 answering the questionnaire was the program for physical education under the supervision of a physical director. This

4 per cent of the schools having supervision, however, includes about 30 per cent of the pupils enrolled and indicates that these few directors have been placed at strategic points..

In 96 per cent of these 228 schools, therefore, with about 70 per cent of the pupil enrollment, the development of the program of physical education is entirely in the hands of the grade teachers without the supervision of a person especially trained in physical education.

About 23 per cent of these unsupervised schools stated they felt the need of supervision, about 26 per cent did not answer the question, and 51 per cent expressed themselves as not needing such additional assistance.

The questionnaires also showed that in 199 of the 228 schools there was supervised play either during school hours or after school. This play was supervised in 188 cases by the grade teacher who was helped in 5 cases by school nurse or coach, older pupils or physical director. In 7 cases the play was supervised entirely by the physical director and others, and in 4 cases the person supervising was unspecified. The amount of time given both in school and outside was not stated in enough instances to indicate the general situation. It is significant, however, that 18 schools state that no supervision is given in school hours and that only 74 schools report that any supervised play is attempted outside of school hours.

In the schools personally observed there were occasionally 2-minute relief drills, sometimes led by the grade teacher and less often by pupil leaders. The marked absence of answers from the teachers to a question in regard to existing recreational activities on the part of the pupils would indicate a probable lack of such opportunities.

96 schools have had play picnics or field days.

95 schools listed outdoor recreative activities such as jumping, running, baseball, basketball, skating, coasting and walking, and a very few spoke of indoor activities, such as dramatics, gymnastic work, and folk dancing.

Some teachers classed "work at home," "work on the farm," "chores," "walking to school," "help with work at home," as recreational activities, and a large number simply left the question unanswered.

SUPERVISORS OF PHYSICAL EXERCISE AND THE CORRELATION OF THEIR WORK WITH THE GRADE TEACHER—Two schools visited were under the supervision of a physical director. In one school the physical director was securing real cooperation from the grade teachers. Health Clubs had not been organized but the children were being interested in

health habits through correlation with other grade work. The physical director was assisting the grade teachers, supplying suggestions and teaching material, and encouraging the development of new ideas and methods through a real interest in and constant contact with the work being done. A health play developed in the third grade had been given before the entire school during the auditorium period and another grade had another play in preparation for similar presentation.

In the other school where a physical director was installed the teachers in the grades felt little responsibility for the health program. They did what the physical director requested, they conducted health clubs, and the rules of the health club were checked every morning, but there was no particular interest shown on the part of the teachers over the scope of this work. That food habits were entirely neglected did not seem to have occurred to many of them. They followed the form of the work but were not infusing spirit and vitality into the functioning of the club. The club was not theirs, it belonged to the Physical Education Department.

The physical director frankly admitted that it had not occurred to him to include food habits in the club rules or to enlist the cooperation and the assistance of the domestic science teacher in this matter.

Each grade teacher was supposed to give the relief drills during the day. Those questioned frankly stated they did not give all the relief drills called for in the program. One said that she usually gave one of the four required, as it was hard to find time and that she thought, because the children went to the physical director for a regular period of physical exercise, that the relief drills were not essential.

There were scales in the school but last year the weighing and measuring had been done by the community nurse, who has since left, and a nutrition class for those found underweight had also been conducted by her. This year there is no community nurse and no one feels the responsibility of continuing the work. The health program of the school was not functioning because proper coordination was lacking and there was no correlation of the work.

A third school visited had had a physical director last year but had been unable to secure one this year. The result was that all health work in the school had been discontinued. There were scales but last year the physical director did the weighing and measuring and organized the health clubs in the grades. This year nothing has been done. The rural schools in the vicinity which had received the supervision of the same physical director showed the same lack of initiative in regard to carrying on the health work. This situation indicates that the physical director had not done supervising work in its truest sense

but had done the actual work of the school room and in his absence the teachers felt not only unprepared and unequipped but also no responsibility to continue the work.

TEACHING AND ADMINISTRATIVE STAFF—Health teaching should primarily be the responsibility of the grade teacher, and therefore it is impossible to consider the adequacy of staff in respect to numbers and salary only in its relation to health teaching. The problem involved touches the whole curriculum and is so wide and important that the consideration possible in such a brief study would be so superficial as to be entirely undesirable. A low standard of work in all subjects will accompany understaffing and insufficient salaries, but it is obvious that where, through over-work and under-pay, the personal health of the teacher is impaired, that teacher's capacity for health teaching is immediately affected. To teach health successfully, the teacher should herself be healthy.

Again the problem of training the teachers for health is closely bound up with the whole educational problem of teacher-training. The teacher who has never been taught herself how to live cannot teach others.

Data in regard to the training of the teachers in the supervisory districts of Erie County were obtained through the courtesy of the State Department of Education and is given in addendum to original report, not printed here. It shows that the majority of teachers whohave had professional training, come from the teacher-training classes and the Normal school. It is, therefore, important to ascertain what opportunities these groups now offer in health education to the prospective teacher.

One Teachers' Training Class was visited in Springville which was conducted in connection with the High School. This year there were as many as 19 pupils of whom approximately 12 were High School seniors. These pupils were taking the training class work with their senior year work and would graduate from the High School and the Teachers' Training Class simultaneously. They would then be able to teach under a Teachers' Training Class certificate which "is valid in any district not maintaining an academic department in the supervisory district for which it is issued by the district superintendent of schools."

Health education in this training class is apparently confined to

1. Formal text-book lessons in physiology and hygiene.

2. A brief discussion in relation to hot lunches. (This is conducted by the training class teacher. The opportunity for help and

guidance offered by the presence of a domestic science department in

the same building has not as yet been utilized).

3. Observation of the methods used in the grade rooms in the building. (No adequate health program was functioning in these grades).

Such limited general training cannot give the teacher an opportunity to start her work with skill or real understanding of pedogogy. She must learn through experience and one has only admiration and respect for the work which many of these teachers have been able to accomplish. In the great majority of the schools visited, the teachers showed a fine spirit in their work and a real potentiality which additional training would make very valuable.

In respect to health teaching in particular the deficiency of training was shown in

- 1. Lack of health consciousness.
- 2. Lack of knowledge as to methods by which health teaching can be made successful.

Many of the teachers realized that the health program was not effective and they wanted to know how to make it real. It was one of the problems which under the pressure of the work and the many demands on their time, they have been unable to solve for themselves.

NORMAL SCHOOLS

The health education course in the Buffalo Normal School is striving to create a health consciousness in the individual student. Physical education seems to receive the lion's share of attention and one received the impression that facts of physiology and hygiene were taught to the exclusion of adequate attention to methods of teaching health. Apparently there is no opportunity given the student for working out a correlation of health with other subjects in her work under critic teachers in the Practice School.

That part of the general course relating to foods and diet is handled by teachers in the Physical Education Department and is not tied up in any way with the excellently equipped Vocational and Homemaking Department.

The responsibility for assisting in developing a health program in the Practice School does not devolve on the students in the Health Education Department.

In the Summer School the only course in Health Education open to the general student is a short course in relief drills and play games.

Channels by which Teachers Receive Stimulation and Help during School Terms:

1. Group conferences arranged by superintendents.

2. Conferences arranged by State.

3. Periodicals, such as "Normal Instructor and Primary Plans." Through none of these channels do the teachers seem to be receiving adequate help as to methods of teaching as related to health or as to steps by which a vitalized health program may be developed. The superintendents are alive to the need of health work in the schools and have already done much to encourage and support those teachers who have initiated vitalized health teaching. Their opportunities for conferences with individual teachers are necessarily limited as each superintendent has a large number of widely scattered schools to reach and no district supervisory assistance.

OPPORTUNITY OFFERED BY SCHOOL BUILDING, EQUIPMENT AND SUR-ROUNDINGS FOR PRACTICE OF HEALTH HABITS DURING SCHOOL HOURS. A large part of the child's day is spent in school surroundings—and it is obviously difficult for the teacher to talk about cleanliness, fresh air, exercise, etcetra, when the school environment itself precludes the practice of such habits.

Actual conditions in the school buildings, as revealed by the answers to the questionnaires, are dealt with in a separate statement, but it seems desirable in this section on health teaching to point out the necessity of having the school buildings, equipment and surroundings of such a character as will promote healthful living.

Very often, however, unsanitary conditions in the school room are simply the reflection of lack of health consciousness on the part of the teacher. It is, indeed, urgent that the schools be adequately equipped—inadequate schools will handicap the best teachers—but on the other hand it is equally urgent that the teachers be so trained that they will make the most of the opportunities at hand in creating an atmosphere of health in which the child may realize, in action, the health teaching he receives. Healthy children in a healthful school are the evidences of the success of a school health program.

RECOMMENDATIONS

It is recommended:

1. That in teachers' training courses especial emphasis be placed on methods of teaching in relation to health and that students in such courses be given an opportunity to observe the practice of these methods in schools.

That these teachers' training classes enlist the cooperation of as many departments in the school as possible in developing the course in health education.

That correlation of health with other subjects in the teacher training course be developed so that the student may recognize the opportunities which the various subjects offer in this respect.

That the special problems connected with the rural school be given particular attention, since the majority of the teachers holding training class certificates will, of necessity, accept positions in rural schools.

II. That the normal schools in the course on health education give more attention to methods of teaching as related to health and that opportunity be given to the practice schools for the development of a health program with the cooperation of the health education department.

That the various departments in the normal school cooperate closely with the health education department in securing a wider correlation of health with all subjects in the curriculum of the practice school. By this means the prospective teacher may learn exactly the extent and kind of help she may expect from the various departments.

- III. That opportunity be given in the summer session of the normal school to give the teacher the training necessary for the promotion of an active health program. Such summer school sessions should offer in health education:
 - 1. A content course (which should be required of all students who have not had sufficient previous grounding in physiology, hygiene and sanitation).
 - 2. Methods course, with opportunity for observation in a practice school.

The problems and difficulties peculiar to rural schools should be given particular attention in these courses.

- IV. That the rural teachers be stimulated to avail themselves of these opportunities by:
 - 1. Personal interest of the superintendent.
 - 2. Credits for promotion.
 - 3. State aid.
- V. That provision be made for the services of a trained educational supervisor for the county, who can give the necessary time and attention to stimulating and guiding the teaching of health, especially in correlation with other subjects in the schools and to such general health educational activities as may be developed through cooperation between the schools and other community forces. Such a person should be well grounded in health as well as in educational subjects generally.
- VI. That in order to reach the rural teachers, especially those who are not reached through courses in teachers' training classes or normal schools, a district rural supervisor or helping teacher should be employed (who should be qualified to help and guide the grade teachers in the various phases of health education as well as in other questions, and also in developing and sustaining a coordinated health program in the school.) Her assistance should be in the in the nature of advice and active demonstration (if necessary) and after the work has been initiated, she should return at frequent intervals to encourage and help the teacher in solving specific problems.

If it is not practicable to employ such a helping teacher in each district, one should, by all means, be employed in one district for demonstration purposes, to be paid preferably from public funds, but if this is impossible the salary to be secured through a committee on coordination of the school health program of the Erie County Health Council.

That in such a case demonstration be made in connection with some live community group with the understanding that if the group is convinced of the value of the work it will undertake to continue it until such time as the educational system can make adequate provision for the supervision of rural health work.

- VII. That the district superintendent further encourage the adoption of an active health program in the schools.
 - 1. Not only by continuing to take a personal interest in the health work which each school is developing, but also by giving special recognition to original methods.
 - 2. By encouraging a closer cooperation of the various departments and a wider correlation of health with other subjects.
 - 3. By assisting the schools to obtain those changes in buildings, equipment and environment necessary to healthful school conditions.
 - 4. By recommendation to the trustees of those text books on hygiene which have a positive emphasis.
 - 5. By arranging in teachers' conferences that health work shall receive due recognition and stimulation.
 - 6. By giving the monthly weight a place on the report card.
 - 7. By securing, by trained persons, proper supervision of health work which shall include not only supervision of health teaching but also follow-up work in the correction of physical defects.

VIII. That since the health club offers something which is capable of wide development in the hands of the teachers, and since the teachers as yet are not using this health club to the best advantage, normal schools, summer health courses, and those press channels which already touch the teacher be used to assist the teacher in developing the possibilities this health club offers and to make its work more vital and effective. This should be done in such a way that it does not add to the burden of an already overcrowded curriculum.

The following points are suggested:

- 1. Care should be taken that the emphasis be always positive in character.
- 2. The rules of health stressed should be the most tundamental and important ones. To include the arrangement of the necktie and the carrying of a clean handkerchief as 2 in a list of 6 health rules, either creates in the child's mind a wrong sense of values or a distrust of the importance of health habits. Also to combine two habits as "drink 2 glasses of milk and cocoa or four glasses of water" gives the child a wrong impression.
- 3. One weakness in the health club as it is generally conducted is the tendency to make it so routine that it become monotonous. Devices must be introduced from time to time to sustain the interest of the child and to stimulate increased practice of those habits which are receiving the least attention.
- 4. The monthly weighing should be connected in the child's mind with the activities of the health club, as a monthly statement of the results of health habits.
- 5. It seems possible in the lower grade rooms and in the rural schools to center all health teaching around the club and eliminate the formal class in physiology and hygiene. This would release a certain amount of time for the curriculum which would offer the teacher an opportunity for teach-

ing health habits through action. Health plays, health songs, health stories, health posters prepared in correlation with other subjects in the curriculum can be given the attention of all and discussed. This time will thus serve to define and clarify the ideas of the children in regard to the important health habits. Individual note books on health may be kept and the child encouraged to express himself as freely as possible in accumulating in this book all stories, poems, pictures, etcetera, relating to health. These books would serve to indicate to the teacher the progress the child has made in the development of health ideas and habits.

IX. That the physical director should be a powerful factor in the health work of any school system, that his function should be to work with and through the grade teacher in the development of a coordinated health program. That the same relationship to the health teaching be maintained by the school nurse and the domestic science supervisor. The actual teaching should be done by the teacher, but she must be able to look for guidance and stimulation to the various experts.

Unless this be the relationship of the work of the experts in the various fields to the work of the grade teacher, there is bound to be a lack of coordination in the health program. The valuable contributions which each department can make to the health education of the individual child will be made even more valuable by such correlation.

X. That a selected circulating library of educational books on health be made available to teachers and nurses as part of the plan of the Erie County Health Council. This will afford the teacher and the nurse an opportunity to keep in touch with the most recent and best books on subjects relative to health and health education.

VIII. ORGANIZATION OF CHILDREN

The latent resources of the child are coming to be recognized increasingly. The trend of education has for a long time been away from the old purely didactic method of teaching and toward the stimulation of thought on the part of the child himself. In spite of this the methods by which the child's initiative and responsibility and independence of thinking may be encouraged and given wider scope have not been given the prominence that they deserved until recently.

While in the project method, the platoon school, and other educational developments more attention has been given to meeting the problems of the individual, the possibility of organization on the part of children themselves is beginning to be recognized as of almost equal importance.

THE CLUB OR LEAGUE METHOD—We find the Boy Scout and Girl Scout movements outside of the schools or sometimes associated with them and reaching the middle and advanced elementary grades. In the schools Little Mothers' Leagues and Health Clubs are organized in many places and the Junior Red Cross is coming to play an increasingly prominent part. These clubs may promote such programs as the

Modern Health Crusade, weighing and measuring the children and following up the undernourished.

Too often in the past health clubs in merely serving as convenient pieces of machinery for promoting some particular activities, have failed to develop their real possibilities to the child for his own self-development. For that reason they have been incidental and have not well served even the end for which they were organized. This is unfortunately true of health clubs in the schools of Erie County in many instances as shown in the preceding section on Health Teaching in the Schools. It is doubtful whether it will be different until there is more direct supervisory help given the teachers of the rural schools by someone who has the time to devote to this purpose as well as a conception of the real functions of such clubs. The superintendents understand the purposes of the clubs but cannot give adequate time to their development.

Scout Organization—The programs of the Boy Scouts and the Girl Scouts are too well known to require discussion in detail here. That they can contribute largely to good health, through outings, health habits and the promotion of community health movements has been definitely shown again and again.

Formerly some casual assistance was given by those active in the Boy Scout movement in Buffalo to troops in outlying sections of the county. For the past few months an organizer has been employed for the development of the Boy Scout movement throughout all sections of the county excluding Buffalo, and it is the hope of those interested in the Scouts that this will result in a largely increased development of troops, membership and interest. On November 7, 1921, there were 16 troops listed in the county excluding Buffalo, with 114 boys registered and 88 on the lists of local troops not yet registered.

Apparently there has been friendly cooperation between leaders of the Catholic and Protestant churches and other agencies in promoting the work of Boy Scouts and on the part of the Scouts in supporting community activities. It is recognized by all that the possibilities for the development of the program of the Boy Scouts have only been touched and that the opportunities for relating the Scouts to community movements are almost unlimited.

The Girl Scout Organization of Erie County is concentrating its efforts very largely upon the development of the troops in the City of Buffalo, with a large field for work and only a beginning having been made in organization. There are troops in five communities outside of Buffalo, with a total registration of 123. Development of

further troops or stimulation of the work of those at present organized in the county will have to wait upon additional funds or the time of someone to be given to this work. However, in the meantime, there ought to be opportunities for other organizations, including the Boy Scouts, to cooperate in the exchange of information and in the promotion of the Girl Scout movement through local groups, such, for instance, as the Clarence Community Council mentioned elsewhere in this report.

OTHER ORGANIZATIONS—The Junior Extension work of the Farm Bureau also should offer many possibilities for cooperative effort with other organizations.

The Protestant and Catholic Sunday Schools of the county already have interested themselves in promoting various health activities and other measures for the benefit of the community. Through officials of the Catholic Church and through the Erie County Sunday School Association, both of which are much interested in further development, there should be unusual opportunities for promoting all of the features of a broadly conceived county health and recreational program.

RECOMMENDATIONS

It is recommended:

- 1. That a committee on children's organizations be formed, including representatives of each of the groups in Eric County actively promoting such organization.
 - 2. That this committee be a committee of the County Health Council.
- 3. That this committee on children's organizations map out a definite program through which the development of children's organizations to serve various purposes may be promoted by all groups in a cooperative way in several communities of the county, as a basis for further joint planning and effort.

IX. RECREATION

It is hardly necessary to submit extensive data showing the great importance of recreation as a factor in the health of the children of Erie County. Its contribution from the point of view of physical rebuilding, mental diversion, the lowering of social barriers thus making easier organized civic effort, and in various other ways is generally recognized. Recreation as it affects the health of children includes not only the healthful and enjoyable use of leisure time outside of the school but those activities in conjunction with the schools which afford a break in the monotony of mental work and under supervision illustrate practically so many of the objectives of the school program, such

as the stimulation of civic ideals, of wholesome conception of health values, and the development of the body. A complete recreational program must include the activities of the pre-school age child if we are to teach the whole art of healthful living during this formative period.

Recreational activities and the facilities which contribute to them are dealt with in several other sections of this report. No attempt will be made here to gather this material together as a presentation of the recreational problem of Erie County. From the section dealing with health in the schools and from the tabulation of the replies to questionnaires from school teachers on the subject of recreation it is obvious that it is a minor consideration in the school program. The actual provision of play space, the facilities which will assist in developing wholesome play, and the amount of supervision from the teaching staff are all slight in comparison to what the importance of the problem demands. While adequate attention to this problem will quite likely not be given until there is a satisfactory plan worked out for combinaton of school districts, much could be done in the way of stimulating the teachers' conception of the possibilities of recreation In reply to the question "In what forms of recreative activities do the pupils generally engage" some answers indicate manual labor at home or on the farm or the simple walking to and from school as the appropriate answer.

The program of the Home Bureau and the Junior Extension Work last year stimulated community sings, plays, pageants and picnics, bur not on a very extensive or systematic basis because of their many other activities.

In the preceding section of this report dealing with Organizatior of Children brief mention is made of the Boy Scout and Girl Scout movements. It would be difficult to overestimate the possibilities of these types of organization as wholesome, constructive forces for recreation in the best sense of the word. The present limitations of these organizations, however, are such that their efforts are intensive in only a few places and in general need to be very much better coordinated than they are in order to secure the best results. The activities of the Sunday School Associations also are referred to in the part of the report on children's organizations. The active and potential force of these associations should be utilized to the fullest in the development of a recreational plan.

The contribution that such local organizations as the Clarence Community Organization, which is mentioned elsewhere in this report and such social centers as that in Collins can make to the development of recreational activities is very great. No complete recreational pro

gram for the county and no coordination of effort on the part of county-wide organizations can be successful unless it definitely recognizes the importance of having various activities clear through a local group organized on a basis that is representative of the community.

RECOMMENDATION

1. It is recommended that the Erie County Health Council shall as early as possible give careful and earnest consideration to the promotion of recreation throughout Erie County, working especially through a committee on children's organizations and also in closest cooperation with the public and parochial school authorities.

X. NUTRITION OF CHILDREN

Because of the general prevalence of under-nourishment as one of the outstanding evidences of lack of physical development and vitality it is most important that a health program for Erie County shall give recognition to the problem of nutrition. An adequate plan for the solution of this problem must include the discovery and correction of defects which are so large a factor in malnourishment, as well as the teaching of the essentials of food requirements and food and health habits and general health supervision.

There should be the right perspective as to nutritional problems in the work of physicians, nurses and teachers, as well as assistance and guidance of trained specialists in nutrition.

From the many studies which have been made in various sections of the country, it can safely be assumed that there is a serious condidition of under-nourishment among the children of any area which has not, over a period of several years, benefited from systematic and energetic preventive and corrective measures.

Under-Nourishment Among School Children—Among the 5,085 children weighed and measured in the recent campaign promoted by the Junior Red Cross in the rural schools of Erie County, 917, or 18 perc ent were found to be 10 per cent or more under-weight (590 were 7 per cent to 10 per cent under-weight, making a total of 1507 children who are 7 per cent or more under-weight).

The school authorities are the first to recognize the seriousness of this problem in the Erie County schools and to urge that more attention be given to it.

Food Habits of Children—It is impossible to give an analysis or an all inclusive statement of the food habits of the children of a large area. Those who are associated with the children daily over a long term are the best judges of what their habits are and of how they affect their general health and physical development.

The following are some typical statements from teachers on th subject:

"Bread and coffee constitute the chief diet of many of our chi

dren."

"My children eat chiefly meat and potatoes. They do not lik milk and eggs."

"Dry bread and water is the lunch of many of our children."

"Bologna sausage and bread is the lunch of many of our chi' dren."

"Many of our children use tobacco and tea and coffee."

"From visiting the homes of my children I find they eat mear potatoes, pie and coffee. Their mothers think they are well fed whe they have meat and potatoes three times a day."

"Some of my children are taking canned milk. They say it i cheaper for them because their parents ship their milk to town. Canne

milk is just as good, is it not?"

The following is a statement from one of the public health nurses "In visiting the homes in the rural districts of Erie County, w find many children under-weight and apparently under-nourished. In some cases it is diseased tonsils or the presence of adenoids, but the majority of cases investigated show that the food habits are at fault We find the children do not drink milk and sometimes they do no like it and the parent, not understanding the great value of milk and well-balanced diet, does not urge and encourage them in the prope diet. In other homes the farmers sell their butter, milk and egg and use canned evaporated milk and oleomargarine. A number o youngsters drink black tea and coffee. In these schools at the lunch hour I find them eating dry sandwches with no butter and nothing but well water to drink. A few of the schools have taken up our sug gestions and started a hot lunch. In the Polish districts the children live chiefly on beer, dry bread and bologna sausage."

The Teaching of Food Habits—Some attempt has been made in the schools to give consideration to the subject of food and food habits. The replies obtained from 228 schools regarding the teaching of food and food habits and the use of scales in the schools, indicated more or less attention to this subject.

According to the answers, 22 per cent of the schools are giving instruction by the grade teacher on eating slowly and at regular hours 38 per cent on food habits (unspecified), 20 per cent on the use of milk 9 per cent. on avoiding the use of tea and coffee, 2 per cent on the use of vegetables, 2 per cent on the use of fruit, 6 per cent on drinking water, 2 per cent on toilet habits, 27 per cent on sleep, and 17 per cent on exercise. 57 per cent of the schools are equipped with scales 42 per cent are without scales, 55 per cent are weighing the children monthly, 15 per cent are weighing them yearly, 49 per cent are reporting the weights to parents, and 49 per cent are not reporting the weights to parents.

77 per cent of the instruction given on food and food habits is given by the grade teacher, 6 per cent by the nurse, 5 per cent by the physical director, only 1 per cent by the home-making teacher and 7 per cent by an unspecified person.

6, or 0.26 percento f the schools determine under-weight of the children by a physical examination, and none of the schools are conducting nutrition classes for under-weight children.

In the 37 schools visited there were no nutrition classes conducted for under-weight children; (2 schools were serving mid-morning and mid-afternoon milk feeding to all children, especially to the under-weight children); 10 were giving food instruction to a part of the children. This instruction was given by the physical director in 1 school, the grade teacher in 4 schools and the home-making teacher in 5 schools.

Home Making Teachers—Of the schools answering the questionnaire 7, or 0.3 per cent employ a home-making teacher. These teachers reach 184, or 0.015 per cent of the 11,347 children in these 228 schools through food courses. The services of these 7 home-making teachers are available to all the teachers in the schools in which they are employed.

There were 5 home-making teachers in the schools visited. These teachers were giving instructions in nutrition and food preparation to high school girls, and in 3 schools to seventh and eighth grade girls. They were also supervising the school lunches and carrying on food projects with the girls in the homes. Through the projects they were introducing the simple rules of nutrition into the homes. In one of the schools visited the home-making teacher was voluntarily giving a course in nutrition to the grade teachers in the evening; in two schools this teacher was giving talks on nutrition to the Parent-Teachers' Association and to groups of women in the afternoon and evening.

Two schools visited have recently introduced the home-making course, and the enrollment in this department is necessarily very low.

From observation in the schools visited it would appear to be desirable, if possible, so to arrange the home-making teachers' programs that they could be assigned to giving talks to the pupils at assembly periods, thus stimulating interest in nutrition, also to giving instruction in nutrition to the grade teachers in their schools. This would be a means of reaching the children through the teachers in the schools employing home-making teachers. It must also be remembered that the instruction given in any subject to the children in the 263 schools in Erie County must come largely through the class-room teachers

and that it is only very recently that any attempt has been made to give the teacher any understanding of nutrition.

Therefore, it is evident, if the subject of nutrition is to be given the proper emphasis in the school program, that the services of a person trained in nutrition should be available to the teachers in all the schools. Where it is possible to free the services of the home economics teacher (who has specialized in food and nutrition) for this work that should be done.

THE PROBLEM OF THE GRADE TEACHER—The difficulties in the way of satisfactory education of children on this subject are illustrated by the following remarks by some of the teachers:

"If you would ask me what we need in our schools I would say good teaching on eating. But I don't know how to teach it, so I just talk about being properly nourished."

"Oh, yes, I teach food. I tell them all about proteids, fats and

all. Last week we talked about water giving vitamine."

"Will you tell me a good book to study, so that I can know what to teach the children? I have a hard time giving them what they like to eat. The last three days we have had macaroni, potatoes and bread

pudding for lunch, and, my, how they like it!"

"Some of the boys and girls, the puny ones, are beginning to believe in food. I have been helping them to plan their menus and we are cutting out potatoes. You see they eat so much potatoes they get 'potato poisoning.' I just had to come out and tell them not to eat potatoes."

"The trouble with so many of my children is they eat dandelions.

Now anybody knows dandelions are bad for you."

"Nearly all my children drink tea and coffee. They know better but they seem to be possessed, their parents tell them that they grew up on it and it didn't do them any hurt."

"I have cocoa and milk for my children, but they won't drink it;

their fathers and mothers say it is all nonsense."

"I wish you would tell me how to teach the children about the things they ought to eat. My principal says it is my business to be teaching and not cooking."

"I will be glad to have the hot lunch, if some one will tell us what

to serve and how to manage it."

THE SUPERINTENDENT'S POINT OF VIEW—The following remarks, made by some of the district superintendents show that they have been seriously considering the question of nutrition in their schools.

"I am wondering if scales and weighing are of any value without

instruction in foods."

"I want to give good instruction to my school. I would like six nutrition specialists in my district, but I should be glad to get one."

"I have been thinking much about food, because I believe in feeding correctly. I am going to try to work it out first through the

home-making teachers and we are counting on this group to help us with the rest."

Remark by Principal:

"I intend to have a home-making teacher in my school and she will teach all the children the choice of food. She will teach the older boys and girls how to cook, also. I may need two such teachers, for I am going to have my school lunch supervised. I also am going to have a physical training director and he is going to teach recreation, not military gymnastics."

Interest Aroused in the Nutritional Problem—The weighing and measuring campaign, initiated by the Junior Red Cross and the State Department of Education, covering 296 rural school-rooms and a total of 5,065 children, aroused a great deal of interest, not only in the schools actually surveyed but in other schools. The school superintendents followed these studies and reported them to teachers and principals generally throughout the county.

Through a cooperative plan in which the school trustee or, in a few instances the pupils themselves, paid \$6.00 toward the purchase of a scale, the Junior Red Cross furnishing the remainder, 141 scales were purchased up to October 1, 1921.

Through the weighing and measuring of children, especial attention was directed to those under-weight, and in some cases the regular reporting of their under-weight to their parents has been a valuable resulting step. Its full value, however, cannot be realized unless this initial interest is followed up with stimulating and accurate advice to the parents and such thorough educational measures for all as will prevent the conditions found. The medical inspectors, as well as the school authorities, are conscious of this need. They are also conscious of the need of a better opportunity for making thorough physical examinations, in order that they may locate the nutritional disturbances in the children which will not be indicated merely by weight. Both the medical inspectors and nurses are anxious to have such food instruction given in the schools as will help to solve the health problems of the school children, and to have such food instruction given to the mothers as will help to meet their problems in prenatal and pre-school work.

Hot Lunches—Of the 228 schools from which information was secured through the questionnaires sent out to the teachers, 96 schools, or 42 per cent, stated that they were equipped with stoves for preparing lunches; 132, or 57 per cent, were not equipped with these stoves; 64, or 28 per cent, of these schools stated that they were serving a hot lunch; 45, or 19 per cent, stated that they were serving a hot lunch

daily; 30, or 13 per cent, were equipped with stoves but not serving a lunch; in 57, or 89 per cent, of the schools serving lunch the students assisted in its preparation: (in 1 school there was a mid-morning milk and cracker lunch served for under-weight children). In the 37 schools visited there were 10 in which hot lunches were served regularly. In 5 of these the menus were supervised by the home economics teacher. In 4, milk was a part of the regular luncheon. In 2 of the schools visited, mid-morning and mid-afternoon milk feeding was offered to all children, but there were no data available from which to judge of the results.

Training in Nutrition—There are unusual opportunities for improvement of nutritional standards in Erie County through the training of physicians, nurses and teachers as many receive this training within the county itself. Of the physicians of Erie County 85 per cent are graduates of the Buffalo Medical School. The private nurses of the county are from Buffalo hospitals. They receive their training in nutrition chiefly through the dietitians in these hospitals. The percentage of public health nurses from Buffalo hospitals in Erie County is comparatively small. Many of the public health nurses who have been trained in Buffalo have been employed elsewhere.

Perhaps the greatest possibility for assisting in solving the nutrition problems of the children of Erie County through training, lies in the opportunities for the normal training of teachers. The home economics course in the Buffalo Normal School is a four-year course with B. S. degree. This compares favorably with training given in other institutions and the school ranks well among normal schools. The Buffalo Chapter of the Red Cross furnished a nutrition specialist for the Buffalo Normal School at the request of the Home Economics Department of that school, the State Supervisor of Home Economics, and the State Supervisor of Nutrition.

Board of Child Welfare—Mothers' Allowance—Four years ago the Board of Child Welfare recognized the need of having, along with their other workers, a specialist who could concentrate on homes where there were malnourished children and where the families needed instruction in meal planning, preparation of foods, household management, sanitation, etcetera. Such a person, known as a Domestic Educator, last year worked with 70 families and brought about a marked improvement in the home life of these families. The Board plans to have the domestic educator handle only the problem cases in home making, etc., as they recognize that in order to do this work, the domestic educator must make frequent calls and do rather intensive

work with the families under her care. They feel that the results of the work of the domestic educator are very satisfactory.

DEPARTMENT OF CHARITIES AND CORRECTIONS—The Department of Charities and Corrections, through the assistance of the Superintendent of the Poor, boards out and places out children. In accomplishing this work it uses placing-out agents, who choose the homes with the thought of securing a place which is best fitted to the all-around development of the child. It has not yet had the services of a specialist such as a domestic educator or nutrition worker, who could assist in securing and supervising homes for the children. Such a person wisely chosen would, no doubt, be valuable in problem cases in nutrition, also in helping institutions in solving their problems in nutrition.

Tuberculosis League and Red Cross—No attempt has been made to study especially the attention given to nutrition by nurses of the Tuberculosis League and of the American Red Cross in their services in Erie County, as mentioned elsewhere in this report. It has not materially differed from similar work by public health nurses generally, but should not be overlooked in an inquiry on the subject of nutrition.

Both organizations agree that it is impossible for their nurses, with their other many duties, to give the fullest attention to this subject. It is certainly not possible for them to organize such work for the schools or through special lecture and class work with clubs.

Junior Extension Work—The Junior Extension Work in Erie County is carried on largely in the schools of the county. It is done after school hours and the projects are developed in the home. The food projects during the year were carried on in 13 townships and were distributed in 15 school districts in as many different communities.

In carrying on home-making projects the group of project workers were organized into a club with a local leader. They met with this local leader every two weeks on scheduled time. The director plans to see each group at least once a month. The local leaders are teachers in the majority of cases. The director is at present planning to have a community woman work with the teacher as an assistant local leader, or as leader, with the teacher as an assistant.

As a result of the extension work in the schools, one high school has developed a home-making department, and in others home-making teachers have taken on junior project work in addition to their regular work. The training in nutrition given the girls through the food

projects includes the proper selection of foods, the planning, preparation and serving of simple dishes and meals, and food preservation. The work has led to increased interest in the choice and preparation of foods and the formation of good food habits, which has resulted in better nutrition for the entire family.

Home Bureau

Organization—The Home Bureau has at present time 31 recog nized community centers. Each one is composed of the school districts which naturally center around it. There is a committee woman in each school district who is responsible for the work of the district These school district committee women comprise the community committee, elect their chairman and plan a program of work for their community.

For convenience, the county is divided into seven districts for holding local leader training schools. The county leader will hold on training school a month at each of the various centers, and have each community arrange to send its local leaders to the schools most con venient for them.

The program for 1920-21 includes the following:

- (a) Lectures on food, food values, child feeding.
- (b) Exhibits of menus on food in cooperation with the city hos pital, the Erie County Fair, and the Thomas Indian School.
- (c) Home nursing courses and the courses in food preservation.
- (d) Milk campaign in the county.
- (e) Conduct of one nutrition clinic for 20 under-weight children and stimulation and assistance in introduction of hot lunche in rural schools.

Coordination in Junior Extension and Home Bureau Work—A to Junior Extension groups and the Home Bureau, the impression wa gained by those inquiring into the child health conditions in Eri-County that their work was very valuable but could be made more sthrough systematic planning and correlation with work of the nurses home economics teachers and others, on a more definite basis for the entire county.

RECOMMENDATIONS FOR NUTRITION PROGRAM

- 1. In order to secure training for those who may take a part in a nutrition program in Erie County, it is recommended:
 - a. That emphasis be placed in medical schools on training in diagnosis and treatment of nutritional diseases and malnutrition.
 - b. That the hospitals training pupil nurses furnish adequate training

- in nutrition for pupil nurses as well as correct nutrition for patients.
- c. That colleges, universities and other institutions offering training to public health nurses furnish adequate training in nutrition for public health nurses as a part of both their regular and graduate courses.
- d. That teacher training courses and normal school courses preparing teachers for rural schools should give all teachers the fundamentals of a proper understanding of subject-matter in teaching nutrition as well as of health habits in general and methods as related to health. That training schools and normal schools should secure the cooperation of all departments in the school to bring about such training and to furnish opportunity for the students to have practice-teaching in the correlation and teaching of such subjects.
- e. That colleges, universities, and other institutions offering training for rural supervisors, or helping teachers, should furnish well rounded training in content and methods for handling all subjects taught in the rural schools, including nutrition and health habits. That especial emphasis be placed on training in correlation of all subjects taught in the rural schools, in order that the rural supervisor, or helping teacher, may work to the best advantage with the trained specialist in carrying on the work in her schools.
- f. That colleges, universities, normal schools and other institutions offering training for the home economics teachers offer special training in content and method in nutrition, and that similar training be given home demonstration agents.
- g. That colleges, universities and other institutions offer such special training for nutrition specialists and nutrition workers as will fit these workers to meet recognized standards for such workers.
- II. In order to secure training for those who could now take a part in a nutrition program in Eric County, it is recommended:
 - a. That the home-making or home economics teachers in the county should supervise menus offered at school lunches and be used as far as their program will permit to give instruction in nutrition to the grade teachers in the areas served by them.
 - *b. That the program for normal schools serving the rural sections of Eric County, should definitely include method and content for the teaching of nutrition, properly correlated with the teaching of other health subjects. This should apply to the program offered by the Red Cross nutrition specialist at the Buffalo Normal School.
 - c. That the Home Bureau manager, the home economics and home-making teachers and others interested in the proper presentation and follow-up of information on the subject of nutrition meet as a group to confer on present programs and to plan definitely more thorough and systematic cooperation in a program which shall serve the whole community, including the schools and the mothers in the homes, rather than promote separate programs.
 - d. That the special rural supervisor or helping teacher (see page 13), shall particularly have charge of the correlation of the teaching

- of nutrition and health habits, under such general health supervision and special nutritional supervision as may be available for the county.
- e. That the Eric County Health Council consider the program worked out by the group interested in nutrition, as part of the health program for the county, and that more home economics teachers (with a major in foods and nutrition) be appointed in the schools, and that the services of a trained nutritional consultant shall be available to all engaged in health work, including nurses, physicians, helping teachers and supervisors of dependent children.

*Note: See the section of this report on health teaching.

XI. HEALTH OFFICERS

The Part of the Health Officer—Too much emphasis cannot be placed upon the importance of the health officer in the development of not only the general community health work, but of particular measures for children. Unless private effort tends to build up, strengther and support the official health work of the community, whether in the schools or in the homes, the results are apt to lack full effectiveness and permanency.

The health demonstration during the past three years in Arlington County, Virginia, is an excellent illustration of the vital part which the health officer can play in developing a live program for child health, as well as for public health generally.

Numbers—In the area covered by this study there are 30 part time health officers, or an average of one for every 3,063 inhabitants. While this might seem a fairly adequate number, it is not possible to use it as a criterion because of the fact that these are part time men who are overwhelmed with many duties. A list of the tasks assigned by law to the local health officers in New York State compiled in 1914, disclosed 231 such specified duties. In view of the meager salary allowance for this position, and the still more meager allowance for public health activities, it is obviously impossible to expect satisfactory work under such conditions.

Duties—Space will not permit an enumeration of all the duties expected of health officers. In general, each one is required by law to make a yearly sanitary survey of his community, to maintain continuous sanitary supervision over the territory under his jurisdiction, to grade the milk supply at least once a year, to enforce within his jurisdiction the public health law and the sanitary code, to promote the spread of information as to the cause, nature and the prevention of

prevalent diseases and the preservation and improvement of health, to carry on public health educational work, and to attend the health officers' school and conferences of health officers. Recording of births is handled by registrars who are required to report communicable diseases to the health officers.

Supervision—The only supervision of the work of these health officers is through the District Sanitary Supervisor of the State Department of Health, who has not only Erie County, but four other counties under his charge. Manifestly it is impossible for him, in spite of much good work done, to give much individual attention to the problems of each of the 30 health officers in Erie County alone.

APPROPRIATIONS—The average appropriation for health work in the 19 health officer districts covered by the district sanitary supervisor in a survey of conditions was \$718. Except for several districts with considerably larger appropriations this average would have been lower. The average per capita of health expenditures for these districts was 18 cents and the median 15 cents. Excepting two communities, each employing a public health nurse, the average was 14 cents per capita. The average salary of the 19 health officers was \$387 and the median \$300. It is hopeless to expect anything approaching thorough public health work from such appropriations and salaries. The health officers devote only a minor fraction of their time to their official duties and their practices must be their main consideration

LACK OF EMPHASIS ON CHILD HEALTH—The very natural result of this situation is that the health officers concentrate their attention primarily upon the handling of communicable diseases and the most gross and obvious violations of sanitary regulations, and give very little attention to other even more important health measures, including the urgent need for an effective child health program.

It is greatly to their credit that a few health officers, in spite of these handicaps, have interested themselves in the starting of new lines of work, including the development of consultations for the under school age child.

Although medical examinations of school children are in many cases conducted by the health officers, there is little effort to follow up these examinations in order to secure corrections. Here also some of the health officers have gone beyond the dead level of mere fulfillment of the law and are trying to make their work tell in building up the children. This subject of school examinations and follow-up is dis-

cussed more fully, with suggestions, in the previous section on School Medical Inspection.

Supervision of Milk—One of the functions of health officers, of especial interest from the point of view of safeguarding children, is the supervision of the production and distribution of milk. In general little has been done to improve milk supplies in the rural areas of the county except where the State Department of Agriculture has secured the tuberculin test of cattle. The larger milk stations, creameries and condensories also have had a good influence on obtaining tuberculin tests of cattle in various parts of the county.

Local Inspections and Grading—The law requires that dairies selling in a community shall have a permit from the health officer who shall make a yearly inspection of them and grade their milk. In no case was it found that dairy inspection had been more frequent than once a year, and often the health officer had made only one or two such inspections all told. In few cases is the milk supply scored with the help of a bacteriological count. The Buffalo State Laboratory reports the receipt of 38 milk samples, coming from only three communities.

Tuberculin Tests—In one village a veterinary employed to inspect dairies had given turberculin tests to all the cattle in these dairies. There is serious doubt as to how far the cattle have been tuberculin tested in other communities in spite of the impression of some of the health officers to the contrary. The County Agricultural Agent reports that, under the accredited herd plan, 187 cows were tested in 1920 and 247 in 1921.

Possible Improvements—The supervision of the milk supply is a problem that will not be satisfactorily solved except through whole time health officer service. Especially difficult is the enforcement of the law by the local practitioner who is hampered by considerations of his practice and the interests of his patients and friends.

A good deal could be accomplished in improving the local milk supplies if a special official from the county (or the state) health department could visit each community with reasonable frequency and inspect the dairies and check up the grading of the milk. Milk specimens sent to the Buffalo laboratory at frequent intervals would be a valuable check on the local grading and very helpful in the educational work to create a demand for better milk. If special containers were furnished by the State Laboratory the samples could be taken to the laboratory by automobile and avoid the present excuse of difficulty of securing a proper container.

Pending the adoption of adequate public supervision of milk supplies, it is important that the mothers be taught by the public health nurse and physician the importance of pasteurizing or boiling all milk before given to their children.

COMMUNICABLE DISEASES—Improvement in information concerning communicable diseases and methods of controlling them is probably the greatest achievement in local official health work in the rural sections of the county. Most of the health officers seem to have an understanding of sources and modes of infection and visit cases of communicable disease reported by the physician himself, to instruct the family in isolation and measures of control. The placarding of homes for scarletina and diphtheria is common with the majority and many do this also for measles and whooping cough.

Reporting—The reporting of communicable diseases by the physicians may be taken to be fairly satisfactory from the evidence, although much could be done through follow-up service for improving isolation and detection of mild, unrecognized cases through the investigation of contacts and suspects. In one community the Red Cross nurse, under the direction of the health officer, had obtained reports of numerous cases not employing a physician, by investigating all reported suspects.

A large percentage of the health officers were found to have distributed state antitoxin. So far as could be learned the Schick test and toxin-antitoxin have not been used as a general preventive measure, although isolation of diphtheria carriers is fairly common.

Wide Variation in Methods—However, there is wide variation in methods and great room for improvement. In one community the health officer felt strongly that it was inadvisable for a nurse to have anything to do with communicable diseases. Several health officers stated they did not visit homes of children sent home from school but depended upon the family physicians' report. A satisfactory working basis between the health officers and the schools for the handling of communicable diseases, as a general rule, has not been worked out. Thoroughgoing study of sources and modes of infection and control and farsighted preventive measures cannot be expected from the part-time health officer with many other duties, and is not found in the majority of cases.

While other data were collected in this study as to present methods of handling communicable diseases, showing many possibilities for improvements in specific instances, the really outstanding need is whole-time health officer service to carry on those epidemiological,

sanitary and preventive measures necessary to supplement the work of the local health officer. If such service is available and, at the same time, adequate public health nursing service is provided, as outlined in the nursing section of this report, it will be possible to build up a thorough system of supervision of contagious diseases in the schools and homes.

Venereal Disease—Although the State Health Department has a division for venereal disease prevention and has developed an extensive program that is being carried out effectively, these activities have not reached into the rural areas of Erie County. In many cases health officers interviewed stated that they had no cases reported and some confided that a large percentage of the cases went to Buffalo for treatment in order to keep their trouble secret from their neighbors. The all-time health officer for the county or for subdivisions of the county as well as an increased number of public health nurses will accomplish much in the way of educational work that leads to prevention or prompt and proper treatment of venereal infections. The prenatal and infant welfare consultations recommended elsewhere should acomplish the same for mothers and infants.

Water Supplies—Most of the incorporated villages have public water supplies which are approved by the director of sanitary engineering of the State Health Department as provided for by the state law. Wells and springs are the sources usually used in the rural communities. In some sections of the county there are fairly numerous springs said to come from limestone. The mountainous character of the country and the sparsely inhabited character of these sections, provide the only safeguard for these springs and wells in the limestone.

Observations of some schools and answers to the questionnaire sent to all of them indicate a very general need not only of protection of the sources of water supply for the schools but of methods of handling the water used.

Possibilities of State Assistance—The Division of Sanitation of the State Health Department has done excellent work since its establishment in 1906, during which time the number of sources of public supply treated either by filtration or chlorination has increased from 50 to 130, and the population served by such sources from 700,000 to 7,000,000. The personnel of this division was cut last year from 13 to 5 members, making it difficult for it to extend its work. The district sanitary supervisor cannot give much attention to this important question because of many other duties.

Local Supervision—During the past year only 14 water specimens were sent to the Buffalo State Laboratory from only 5 different communities in the area included in this study, and only 29 to the Albany laboratory from 11 different communities. Among 19 health officers questioned regarding laboratory examinations of their local water supply, 8 replied that they did not know when the water had last been tested or stated that it had never been tested, while 1 other claimed that the water had last been tested 5 years ago, 5 others made the statement that their supply had been tested a year ago and 1 other claimed that he had received a report from the laboratory 6 months ago.

It is obvious that not much improvement in the purity of water can be expected from the present supervision by part time health officers.

Inadequacy of Present Methods—This is another example of work which needs to be done for the protection of public health which, according to all indications, will wait for the establishment of all-time health officer service for the county, or sub-divisions of it, to supplement the work done by the present part-time health officers.

In the meantime the health agencies and their representatives in the county as far as possible should promote the use by families or individuals, who do not have a satisfactorily tested water supply, of simple forms of chlorination or of boiling the water, especially when there are cases of typhoid fever in the vicinity.

Sewerage—Depew, East Aurora, and parts of West Seneca are fairly well sewered. Springville and North Collins have sewers for a part of the village, although Springville is said to have an unsatisfactory method of disposal. Septic tanks and cesspools are used for the homes of persons in better economic circumstances. In some sections cesspools are the rule, while in others septic tanks with subsurface drainage have been operated successfully for several years and are coming into more and more use. The old-fashioned openback privy is still used on a large percentage of the farms. The lack of community sentiment making against this nuisance is particularly noticeable in the sections where they have not yet obtained a sanitary toilet for their school.

RECOMMENDATION

Many instances have been cited in which great improvement could be effected in the work assigned by law and custom to health officers of the rural sections and villages of Erie County. Much might be done in safeguarding milk and water supplies, in improving the control of communicable diseases, in bettering methods of sewage disposal, and in the organization of consultation centers for children, and in child hygiene work generally. Prior to and following the adoption of effective health measures of control a great deal needs to be done in the way of educating individuals in the home, in the schools, and in organized groups. However, as shown above, it is impossible to expect much more improvement over the present methods under the existing part-time and low-pay plan for local health officers.

1. It is recommended that one of the first considerations of the Eric County Health Council and of its constituent groups shall be to secure the services of a whole-time health officer for Eric County and a whole-time health officer service as rapidly as possible for smaller administrative districts covering the rural sections and villages, to supplement the present work of part-time local health officers.

It is obvious from the data given above that the services of alltime health officers are essential if satisfactory health work is to be done in the county, supplementing that of present part-time health officers. In addition to a county health officer, who is the first requisite, there should be such officers in charge of districts not so large that each cannot keep in close touch with all the local physicians and school authorities and with public health nurses available for his assistance. Probably the county should, as soon as practicable, be divided into 5 or 6 districts with an all-time health officer in each who can carry out those important epidemiological, sanitary and educational measures necessary to supplement the services at present rendered by the part-time man.

XII. MENTAL HYGIENE OF CHILDREN

The main purpose of the inquiries on mental hygiene in Erie County has been to bring to light the problems in the rural areas. Those facilities and agencies outside of the rural sections whose assistance is available to them for mental hygiene work, particularly in Buffalo, will also be dealt with briefly. This will make clear what are some of the county's most immediate resources.

Public Schools—Because of some bearing which the Buffalo schools have upon the mental hygiene program of sections of the county outside of Buffalo, a statement of the results of inquiries concerning mental hygiene work in the schools of that city will be submitted in a supplementary report. This report may also deal with the city health department, hospital and dispensary facilities for assisting in this problem.

Outside of Buffalo little has been done especially for mental hygiene in the schools. In cities and larger villages with good-sized schools the school authorities are attempting to make special provision for atypical children.

A Progressive School—Among the schools visited, one in Hamburg is especially noteworthy. One of its teachers has displayed an unusual interest in this work, and with the support of the principal, equipped herself by taking special courses for psychometric work and for work with atypical children. Although this school had no special class, those children presenting special problems had been selected and given a great amount of individual attention, which is even better.

In this school was found, as elsewhere, the usual handicap of lack of room, of funds, and of an adequate force of personnel trained for such work.

THE SMALL UNGRADED SCHOOL—In those parts of the county in which there are only small ungraded schools, there is no such thing as mental hygiene work. Practically in every school room visited were found, as might have been expected, one or more extremely backward, troublesome, delinquent, or otherwise mentally abnormal children. It would be impossible to make other than a general estimate of how many additional atypical children might be found upon thorough investigation.

THE LOCKWOOD LAW AND THE NUMBER OF RETARDED CHILDREN—In this connection two points should be emphasized:

(1) The Lockwood law, which provides that any school district which has 10 or more markedly retarded children shall establish a special class for them, often remains a dead letter. This is because practically nowhere in the county has the exact number of atypical children, for whom special classes should be provided, been scientifically determined. A thorough survey would undoubtedly reveal many school districts with 10 or more such children, either in the school or in their homes. In no other way can a basis for the enforcement of the Lockwood law in rural districts be established.

Answers to a questionnaire which was sent to all the schools reported a total of 192 children, or 1.7 per cent, retarded three years or more. The percentage, however, on the basis of total registration varied between 0.7 in one supervisory district and 2.4 in another. Retardation alone, even if fully reported, cannot be an exact basis for the selection of cases requiring special attention from the standpoint of mental hygiene.

(2) The mentally abnormal pupils in rural schools are not all of such children of school age residing in that district. In the Nassau County Survey in 1916 the bulk of mentally defective children of school age were to be found outside of the schools. It is likely that the most defective are precisely those that are not in the schools because of the great difficulty of managing them. It is probable that conditions in Eric County are not markedly different in this respect from those in Nassau County and elsewhere.

The health officer of one township reports as follows: "I know of many mentally deficient children living in this township. They have not been committed to institutions but are cared for in their own homes. The schools are small here and the teachers do not object to their attending, otherwise I would have to see that they were expelled from the schools."

A review of the conditions with relation to the mental hygiene of children in the small rural schools of the county reveals their many handicaps, particularly in the way of lack of trained personnel and lack of space and facilities for special classes or instruction for the mentally deficient. The need for a combination of small school districts on a sound basis, as recommended on page 16, is very great from the standpoint of mental hygiene.

PAROCHIAL SCHOOLS—A beginning has been made toward organizing mental hygiene work in the parochial school system, although special classes have not yet been developed either in the urban or in the rural parts of the diocese. Psychometric work has been introduced and the results of it have been found useful from the teaching standpoint. A physician is employed who has specialized in applied psychology, and in individual instances pupils have been transferred to special classes in the city public schools by special arrangement.

Further development of this work is receiving cautious consideration on the part of the authorities of the parochial schools.

ORPHAN ASYLUMS—The problems in the orphan asylums, pertaining to atypical children, are similar to those in the schools, excepting that in all probability the asylums have larger percentages of such children to deal with, and that they not only teach but perform services which school children receive in their homes. Moreover, they have charge of many children younger than school age.

Mentally Defectives a Serious Problem—In visits or correspondence with 3 orphan asylums, a day nursery, a fresh air mission and an Indian school, the information invariably given was that the care

of mentally abnormal children was not within the scope of these institutions' activities. Just as invariably, however, it was revealed that a number of such children find their way into these institutions and constitute a vexing problem. Owing to the inadequacy of institutional provision by the state for such cases, orphan asylums are often forced to care for them indefinitely.

As it is not their policy to do such work, special classes, systematic mental examinations or psychiatric work is not attempted by these institutions. One exception was noted in the county, namely, a group of Catholic institutions which has a special class and in which a certain amount of psychiatric work is done. (It should be noted that the Thomas Indian School is planning to introduce intelligence tests, and has the cooperation of the State Board of Charities in its plans.)

There were found to be 18 other institutions for the care of orphaned, dependent and delinquent children in Erie County, showing that the problem is a large one. (For list of these institutions, see original report sent to Erie County group which invited this study.)

An Illustration—As a special instance of some of the difficult problems occasionally confronting those in charge of orphan asylums the following may be mentioned:

A boy of unknown parentage, judged to be about four years of age, was found on the doorstep of one of the institutions with a letter pinned to his clothes stating that he had had meningitis and from that had become mentally defective. At the time of the visit to the institution he had been there only a week or two. He bites other children, takes plates and other dishes from the table, digs his fingers into the food, will not use a fork or spoon, is very intractable, and on one occasion tried to throw a glassful of water at the attendant. He walks with an unsteady gait, falls frequently, does not talk, but makes a great deal of noise. The attendant in charge of him thinks that he understands what is said to him, but is disobedient. None in the institution think that he is a suitable case for detention there, but they are experiencing difficulty in disposing of him.

Valuable Opportunities for Observation—It is important to note the unusual opportunities for observation and study which exist in such of these institutions as care for infants of various ages. The subject of anomalous behavior in infants has not received the attention and study which it merits. Observations of individual infants here and there in private families, under conditions so varied as to interfere with judgment as to what might be inherent and what of external origin in the tendencies of the child, are not to be compared with similar

observations that could be made in institutions where the infants are under more or less uniform or known conditions.

In the ward for infants under I year of age in one asylum visited, the Sister in charge reported that peculiarities of a striking and persistent kind are frequently observed in some infants who thus are markedly distinguished from others. Some exhibit a habit of rolling the head on the pillow. Others have a habit of rolling the entire body in the crib, which seems to have a sedative effect on the child, who is quiet when permitted to do this, and soon goes to sleep, the rolling sometimes continuing after the child falls asleep and then ceasing gradually. Still others have a tendency to cry far more than is usual for infants, such crying being apparently attributable neither to hunger nor to discomfort of any kind from external cause.

Institutions Outside of Eric County—The following institutions outside of Eric County which are rendering or may render service to children of rural sections of the county should be especially mentioned as some of them care particularly for mental defectives and there is as a rule a high percentage of this class of children in institutions of the types represented by the others.

Institutions for Mental Defectives—Syracuse State School, at Syracuse, New York, has 13 children from the entire area of Erie County; 3 others have had applications filed and are on the waiting list. Rome State School, at Rome, New York, has 57 children from the entire area of Erie County; while none are officially on the waiting list it is reported that many would be if any vacancies were known to exist. Letchworth Village, at Thiells, New York, has 17 children from the entire area of Erie County; 2 others have had applications filed and are on the waiting list. It should be noted that the numbers of children given are from the entire area of Erie County. No attempt was made to segregate those from the rural sections and villages, i. e., the area covered by this report.

Epileptics—Craig Colony, Sonyes, New York, has 11 children from the entire area of Erie County; none are on the waiting list.

Other Institutions—New York School for the Blind, at Batavia, New York, has some children from Erie County although the exact number was not ascertained. The Jewish Orphan Home, at Rochester, New York, has 19 children from Erie County. Only in certain cases have they been able to arrange to have psychometric tests made. The annual report of that institution states that occasionally delinquent and feeble-minded children are admitted there, although it is contrary to the declared policy of the institution to receive them.

When a child is discovered to have marked mental abnormality, efforts are made to dispose of it either by discharge or by transfer to an institution for the feeble-minded.

Delinquent Children Such mental hygiene work as is done for delinquent children is carried on partly by the Children's Court of Buffalo, with which is connected a small Detention Home; partly by the Children's Aid and Society for Prevention of Cruelty to Children which conducts an institution known as the Children's Shelter; and for the rest, by the justices of peace of the various townships in the county to whom is available the cooperation of the Chief Probation Officer of Erie County, whose office is in Buffalo.

The Volume of Work—The volume of work of these agencies is striking. During the calendar year 1920, which is the last period for which official data are available in a published report, 1176 cases were disposed of by the Children's Court, of which 1060 were cases of boys and 116 girls. Of this number 134 boys and 41 girls were committed to institutions such as the State Agricultural and Industrial School, Industry; St. Agnes' Training School for Girls, Buffalo; New York State Training School for Girls, Hudson; Society for the Protection of Destitute Roman Catholic Children, Lackawanna; Berkshire Industrial School, Canaan, etcetera; 335 cases were discharged, 258 reprimanded and discharged, 262 placed on probation; of all those brought into court 209, or about 18 per cent, received a psychometric examination.

Court Staff Needs—All Court cases are investigated by the Chief Probation Officer or one of his three assistants. The court authorities, however, feel that this work falls short of what it should be, both qualitatively and quantitatively. It should include psychometric work, field investigations by psychiatric social workers capable of taking anamneses, and examinations by psychiatrists. Mental examinations should not be limited, as they are now, to about a fifth of the cases going through the court, but should be applied to all.

Children's Aid—The Children's Aid and Society for the Prevention of Cruelty to Children and Children's Shelter are now merged in one organization, housed in a modern building. About 600 children between the ages of 2 and 21 are admitted per year. The building has a capacity of 80 or 85 and is well equipped. Children are brought to this Shelter either by agents of the Society for the Prevention of Cruelty to Children, or by order of the courts, or when referred by other agencies.

This institution conducts a psychological clinic, which engages the full time services of a well trained psychologist. Almost all children receive a psychometric examination, as well as a sociological and physical investigation. The clinic has available to it the volunteer services of an excellent psychiatrist, who is in private practice in the city. Between 4 and 5 per cent of all cases have heretofore been referred to him for psychiatric examination.

Further development of this work is contemplated. Plans are now being discussed and will probably materialize in the near future, which will enable the superintendent to provide two wards for psychopathic children, where they may be kept under special observation.

The work of this organization might be helped if more attention should be given to the psychiatric training of the social workers employed and if more cases were referred for psychiatric examination.

A merging of the work of the Children's Court with the work of this institution would, if feasible, justify the employment of a psychiatrist on full time and would obviate the need of depending upon free services.

Rural Conditions and Facilities-Outside of the City of Buffalo there are no special children's courts, delinquent children being brought, like other cases, before justices of the peace. There are also no places for detaining delinquent children pending investigation and trial and no facilities or personnel for either physical or mental examinations. Several justices were interviewed and all of them have been communi-They report that very few children are brought before cated with. them. One of them stated: "Since entering upon this office, I have had but one case of delinquency in a child, namely, in a girl about sixteen years of age who had previously been committed to the House of the Good Shepherd; later re-committed to the same institution. from which she ran away after breaking down doors, destroying She was recaptured and her mother took furniture, and so forth. charge of her again. Just where she is now, I am unable to say. There is no doubt in my mind that this unfortunate girl is mentally deficient."

Another, who is both a justice of the peace and a school trustee, stated: "I know of no mental deficiency among the children in this neighborhood at this time. About the only cases that come before me are cases of truancy. Then the parents get it good and hard from me, for we make it as pleasant for the children in school as we can to make them want to come instead of playing hookey."

Still another justice of the peace related the case of a boy who had been brought before him four years previously. This boy had

been brought up in bad surroundings. His mother had almost no control over him and he had a stepfather who often whipped him for trifling things, but paid no attention to serious wrongdoings. The boy had vicious tendencies. Once he took a kitten and cut out its eyes to see what it would do and then let it go. He stole knives, pencils and other articles at school. Once he stole a new copper boiler which his mother had purchased, broke it up and tried to sell it to the junk dealer. On other occasions he stole a cap and some small change out of a cash register in a store. He was committed to Industry, N. Y., for a year, but because of bad behavior there was kept a little longer. A couple of years later he took a girl out in a boat on the lake and they were both drowned.

Most of the justices of the peace do not know that the various facilities in Buffalo for the examination of children would be available to them upon application, but those with whom this point was discussed stated that the town would probably object on account of the expenses that would be involved in transportation.

County Probation Work—The County Probation Officer's Head-quarters are in Buffalo. He is supposed to have charge of children on probation in all parts of the county outside of the City of Buffalo, those in the city being in charge of a special department which the city maintains for that purpose. Owing to the difficulty of transportation and shortage of personnel, the County Probation Officer has had but little contact with the justices of the peace in the various townships, at least so far as delinquent children are concerned. During the past fiscal year probably not over 15 or 18 juvenile delinquents have been cared for by the County Probation Officer. The number of cases of children brought into the courts, however, must have been greater.

There is some prospect of an improvement in this situation through an increase of personnel in the department and through having an automobile made available to it for trips anywhere in the county.

The County Probation Officer has various ways for having a child examined mentally, such as by taking it to one of the out-patient mental clinics conducted by the Buffalo State Hospital, or to the Children's Aid diagnostician. But usually he refers cases to a private physician who is engaged in psychiatric work and has the examination made on a fee basis. Not all children receive a psychiatric examination. This is one of the many instances which show that a better coordination and use of the available facilities for making mental examinations for children would result in more complete and more thorough work.

DEPENDENT CHILDREN—The Eric County Board of Child Welfare reports that during the calendar year 1919, 334 families were given aid by their organization and during 1920 there were 273 families. All children received a physical examination either at one of the health centers in the city or in the city tuberculosis clinic, or by private physicians. During the year 1920, 1,167 children were examined. Only a small number received a mental examination; namely, either those whom the physician making the physical examination especially referred for such an examination, or those who were reported as doing very poorly at school.

Owing to the difficulty and expense of transportation, the children in the rural parts of the county are seldom brought to the city for examination and hardly any of them are mentally examined. If various parts of the county were visited by an itinerant mental clinic, all dependent children in the rural districts could receive a mental examination. The mothers of these children also could receive a mental examination and thus the law would be more strictly complied with

Mental Clinics—The out-patient mental clinics conducted by the state hospitals in Erie County consist of three by the Buffalo State Hospital, all in Buffalo, and one by the Gowanda State Hospital, also in Buffalo.

Although both the Buffalo and Gowanda State Hospitals have announced their readiness to examine either children or adults, at any time that they may be brought to the hospital, patients are very seldom thus referred to them. There is a strong and general disinclination to go to an institution for the insane or to send a child there for an examination.

Of the four out-patient clinics, two are as a rule used only for adults, while the remaining two, one conducted at the Jewish Community House every Wednesday morning from 10 to 12, and the other at the Children's Hospital every Thursday afternoon from 2 to 4, are mainly for children. During the year ending June 30, 1921, 148 children under 16 years of age were examined in this clinic, but scarcely any of them came from the rural parts of the county, owing chiefly to the difficulty and expense of transportation. The great majority of these patients were diagnosed as mentally deficient or mentally retarded, but there were also cases of psychopathic personality, epilepsy and psychoneurosis and 23 were designated as normal. Full advantage of these clinics has not always been had, due apparently, to the lack of careful planning in advance as to the type of diagnostic

service which might best help the other organizations, but this is merely a matter of adjustment, as the personnel and equipment are of the highest quality.

The Need of the Rural Areas—It is obvious that these clinics are not serving the rural areas of the county and a mere increase in numbers, even if in new locations, would still leave most of the outlying sections without service.

In order to make psychiatric service available for the schools, justices of the peace, overseers of the poor, health officers, and other organizations and officials throughout the county, it would be necessary to organize an itinerant mental clinic. Such a clinic could visit each of the 25 townships in the county outside of Buffalo twice each year, and should be arranged through the County Health Council in cooperation with any consultation or supervisory medical work for the schools. These visits, if announced in advance, would enable the rural authorities to have children and others selected for mental examination, so that periodically the psychiatric problems in every community would be placed in the hands of those best able to deal with them efficiently.

As far as the state hospitals are concerned, such an itinerant clinic would not involve the employment of more personnel or the expenditure of a greater amount of time than would be necessitated by the establishment of but one additional fixed out-patient clinic with a single weekly session. The only added expense would be that of automobile transportation once a week.

If the two state hospitals in the county would divide between them this work so that the Buffalo State Hospital would send out its itinerant clinic to the townships in the northern half, and the Gowanda State Hospital to those in the southern half of the county, then for each of these institutions the establishment of such an itinerant clinic would involve but half the labor and time that would be required for the establishment of one additional clinic in a fixed locality.

If a cooperative plan for itinerant consultations involving more than one medical service should be worked out in cooperation with the proposed County Health Unit, this would mean decided economy in personnel and transportation.

Outside of the work in their out-patient clinics, the state hospitals have seldom opportunities of rendering psychiatric service in cases of children. This is due to the striking rarity of psychoses in children under 16 years of age. At the present time there is not one patient under 16 years of age from Erie County in the Gowanda State Hospital, and but one in the Buffalo State Hospital. During the year ending

June 30, 1921, seven patients from Erie County under 16 were admitted to the two hospitals, three had had manic depressive psychoses and four had dementia praecox.

Superintendent of the Poor—The County Superintendent of the Poor in Buffalo deals with dependent children as described in the succeeding section of this report. He deals with mental disorders in childhood only in those marked cases in which the necessity for commitment to an institution for the epileptic or feeble-minded arises.

Not Enough Institutions—Although the present incumbent of this office is very conservative in the matter of committing children to such institutions, feeling that it is a step justified only as a last resort and that even a definitely feeble-minded child should be first tried in a private home or on a farm before commitment is decided on, yet he finds the State's facilities for the care of children who must be committed to such institutions very inadequate.

At present he states that the county is compelled to maintain 15 children in the Brunswick Home in Amityville, L. I., a private institution to which the county pays a certain amount per week for the maintenance of these children.

Not only are the facilities which the state provides for feeble-minded, epileptic, and otherwise mentally abnormal children inadequate, but such facilities as are available are in institutions located for the most part hundreds of miles distant from Erie County. Owing to this circumstance the relatives of children who should be committed are often unwilling to consent to such commitment, as they would have to be taken so far from their homes that visiting would be rendered difficult or impossible.

From the Superintendent of the Poor and from other sources we have learned that there is a great need for an institution for mental defectives in the western part of the state. Owing to the fact that the State makes such inadequate provision, Erie County has developed a plan to build at Alden, where it owns 900 acres of land, an institution which would include an almshouse, penitentiary and a separate department for mental defectives.

Neuro-Psychiatrists in Private Practice—Erie County, especially Buffalo, is unusually well supplied with neuro-psychiatrists among its physicians. Outside of those who are on the medical staffs of the two state hospitals, there are in private practice at least 10 psychiatrists or neurologists interested in psychiatry, seven of whom have had state hospital experience. They are available for work on a fee basis; but most, if not all, are also ready to offer their services, so far as they can spare the time, to public institutions, gratis. Some are on

the medical staff of the Buffalo City Hospital and others are employed on part time on a small salary basis by the Department of Health for psychiatric work.

RECOMMENDATIONS—In order to formulate recommendations for the more purposeful utilization of existing facilities and resources of the county for the work of mental hygiene among children and for the creation of new facilities required to round out the existing organizations, it is necessary, first of all, to determine upon a general plan of mental hygiene activities as the goal to be attained.

1. Work in the Schools—It would seem highly desirable to introduce in the schools the systematic practice of group tests of intelligence. On the basis of these tests and also on the basis of retardation in school work, anomalies of behavior and evidences of nervous or mental disease, children may be selected for individual examination.

Perhaps the next step would be to provide for individual psychometric tests in all cases thus selected.

The third step would be to investigate the home conditions in each case and to secure full anamneses with the aid of psychiatric social workers. These investigations and anamneses together with the general medical examinations which school children receive, should form a basis for explaining such phenomena as retardation, truancy, unruliness, and so forth.

The final step would be an examination of the data already collected and of each atypical child individually by a trained psychiatrist which should lead to a diagnosis and recommendations for the treatment and disposition of the case.

The school system should further develop its facilities such as special classes, trained personnel, and so forth, for carrying out the recommendations resulting from investigations of children as outlined above.

2. Work With Children Not in the Schools—For children who come to the attention by reason of nervous or mental disorders developing before or after school age and for those who come to attention by reason of dependency or delinquency, provision should be made for investigation along lines similar to those outlined above for school children.

The plan here outlined would meet to a large extent the social hygiene needs of children, inasmuch as psychiatric problems are often found underlying social diseases among them. The timely discovery and attack upon such problems would in many cases constitute a measure of social hygiene, that is to say, prevent venereal disease. For the rest social hygiene must be considered a part of any well-rounded plan of general health work.

3. Need of Trained Personnel—One of the first needs brought to light by this study is that of trained personnel for the various functions in the work of mental hygiene. At the present time, owing to imperfect organization of existing facilities, it is not only true that the energies of the valuable personnel are inadequate for the work that has to be done, but also that these energies are employed in an uneconomical way. It should not be necessary for the psychiatrist of 15 or 20 years' experience to do psychometric work, or take anamneses, inasmuch as many teachers and others can readily be trained to do it.

It is recommended that teachers who are interested in such work be trained to perform group tests. Such work could be safely entrusted to them, as its object would never be the final and definite classification of children but only a preliminary classification intended as a basis for further investigation. Other teachers, possessing better qualifications of education and experience, should receive more advanced courses of training to fit them for the more responsible work of individual psychometric testing. A third group either of teachers, or school nurses, or social workers, should be given courses in psychiatric social work including practice work in field investigations and obtaining psychiatric anamneses. Finally, a fourth group of teachers should be trained for various phases of work with atypical children in special classes.

In the course of the survey, a canvass was made of those educational institutions in which such training might be provided. In the University of Buffalo, departments of both medicine and arts and sciences, extension courses and summer courses are already being given in applied psychology, abnormal psychology, and psychiatry. Conferences with heads of departments have led to the conclusion that it would be entirely practicable to outline and provide courses specially devised for training personnel for the various kinds of mental hygiene work mentioned above.

In the State Normal School in Buffalo there is an excellent department of psychology in which also far-reaching attempts have been made to develop summer courses in applied psychology. With the increase of the reglar normal school course from two to three years, further development of that work for all student teachers has been planned.

Perhaps the most significant steps in this direction have been taken by the State Normal School in Geneseo in cooperation with the Craig Colony. This school conducts practical courses at the Craig Colony for the purpose of supplying special training to seniors who are interested in work with atypical children. Eight critic teachers have for nearly two years been maintained on full time at the Craig Colony, being paid from the budget from the Geneseo State Normal School a usual salary, minus a deduction of \$240 a year in lieu of which they receive room, board, and laundry at the Colony.

These teachers have organized classes of from 8 to 25 pupils selected from among the patients in the Colony. The teaching consists in academic work, weaving on looms, lace making, tatting, crocheting, plain sewing, rug making, carpentry, chair caning, toy making out of rags and out of wood, kindergarten training, physical culture and singing. Groups of about five or six student teachers are assigned to work at the Colony for a period of one week for each group. They derive from such an assignment an opportunity to observe methods of instruction; a certain understanding of various mental and physical handicaps which should help them to recognize them and make intelligent allowance for them upon encountering them in the course of their teaching; also a certain amount of training in the work itself which is being taught to the children, such as various stitches, how to use a loom, and so forth.

These courses are optional, but of about 200 senior students no fewer than 120 have signed their names to applications for them. They constitute, of course, only an introduction in the needed training, but it is a plan of the

normal school authorities to increase their scope and their variety so as to fit teachers for the various functions in mental hygiene work among school children, such as those enumerated above.

This special development of the Geneseo State Normal School would by no means eliminate the need for extension courses in Buffalo University, Buffalo State Normal School, and possibly in Canisius College. For those teachers whose work is in Buffalo it would be advantageous to have special courses offered in the local educational institutions, for only thus would they be enabled to utilize any spare time they may have during afternoons, evenings and Saturdays for getting such training.

- 4. Standards for Psychometric Work—Perhaps this is the proper place to refer to the uncontrolled and often incompetent psychometric work that is done in many places. It would seem to be the proper function of the American Psychological Association to decide upon standards of requirements for the various kinds of psychometric work that has to be done. Those engaged in such work should be able to show that they have conformed to such standards and should thereupon be officially certified by a proper committee of the Association, the certification specifying whether it be for administering group tests, or for individual tests in the capacity of assistant, or for independent work as professional psychologist. Courses offered by the universities, colleges and normal schools should be planned with a view to meeting such requirements.
- 5. Increased Institutional Accommodations Needed—Very often the recommendations which result from a psychiatric study of a child cannot be carried out on account of lack of necessary facilities. Some of the special needs have already been discussed. Those most keenly felt are a new institution for the feeble-minded in the western part of the State of New York, perhaps in Erie County, and the establishment of special classes for atypical children in the public schools. It should be noted in this connection that, as far as parochial schools are concerned, the Lockwood Law is not mandatory but optional.
- 6. Psychiatric Service for Rural Areas—The greatest obstacles in the way of organizing special classes are encountered in rural parts of the county. The chief improvements will probably come through the combination of school districts referred to on page 16; but even then rural schools will still be at a disadvantage in comparison with urban schools, for the reason that one school, even if it be a large one, cannot organize special bureaus such as a department of education of a large city has. While a larger rural school can develop personnel for group testing, individual testing, psychiatric social work and teaching of special classes, it cannot so readily secure the services of trained psychiatrists whenever needed.

In order to help rural areas, and especially rural schools, meet the need for trained psychiatric service, organization of an *itinerant mental clinic* is recommended. This has already been referred to and its general plan described. Information secured from neuro-psychiatrists practicing in and around Buffalo indicates that some, if not all, would be willing to accept positions on the staff of such an itinerant clinic and thus relieve the state hospitals to some extent of the burden of carrying it on. However, such a clinic should be under the control of the state hospitals, just as the fixed clinics are, in order to insure proper supervision, standards, records and reports. It should, of course, conform to the plans and procedure for the

medical examination of school children, especially in so far as they relate to itinerant consultation or clinic work.

7. Organization for Continuing Work—The next recommendation deals with the problem of so organizing and controlling the mental hygiene work in the county, especially among children, as to secure for it the highest measure of efficiency with the least expenditure of energy and resources.

There should be some agency for co-ordinating the mental hygiene work of the schools of the city and of the rural parts of the county, orphan asylums, children's courts and justice courts, the Children's Aid Society, the Board of Child Welfare, the two state hospitals, the Department of Health of the City of Buffalo, the Department of Hospitals and Dispensaries, the Office of the County Superintendent of the Poor, and neuro-psychiatrists in private practice.

In order to bring this about, it would perhaps be best to organize an Erie County Committee for Mental Hygiene as a Committee of the Erie County Health Council. To this committee might belong, ex-officio, officials who are concerned with the education, management and control of children, including not only heads of large departments, but also representatives of such groups as the school teachers, nurses, social workers, physicians, psychologists, probation officers, justices of the peace, and overseers of the poor.

This committee, working through the County Health Council and with due regard to the importance of other health needs, should have as one of its objectives the organization through paid workers of a complete program of mental hygiene work in each part of the county, as part of the general public health program. The objects of this committee should be carefully formulated and among its functions should be that of furnishing scholarships to enable teachers, nurses, and others to take special courses of training provided by universities and colleges in extension teaching and summer sessions. It also should be one of its functions to hold from time to time meetings not only for its own members, but open also to the public, at which important subjects in mental hygiene should be discussed by competent authorities in a way to be of educational value to those in attendance.

8. Research—In general, the most obvious need for the development of mental hygiene among children—one which did not require a survey to bring it to light—is that of organizing research for increasing our knowledge of the mental disorders of childhood.

Although psychiatry has made great strides in the last twenty-five or thirty years, this part of it has not kept pace with its general progress.

Owing to the fact that any mental disorder occurring in childhood, no matter what its nature, is bound to act as an obstacle to development in intelligence, the tendency has become prevalent to diagnose almost all cases as mental deficiency. This tendency has been strengthened by the undue reliance which it has become customary to place upon a showing made in psychometric tests.

Should it prove possible to organize the work of mental hygiene among children along the lines indicated in the above recommendations, even only in some one county, unprecedented opportunities would be created for research in this branch of psychiatry. It need hardly be emphasized that, with the possible exception of eugenic measures, there is no more important field of psychiatric prophylaxis than that of work among children. It is,

therefore, to be hoped that either in Erie County or elsewhere, in the near future, some such organization as is here suggested may be developed and thus the stage set for research and further progress.

XIII. THE HEALTH OF DEPENDENT CHILDREN

Dependent children of the rural part of Erie County are cared for by three agencies: the County Board of Child Welfare, which administers the widows' pensions; the office of the Superintendent of the Poor for Erie County; and the Children's Aid Society, a voluntary organization.

THE COUNTY BOARD OF CHILD WELFARE—The Board of Child Welfare during the year ending June 30, 1920, had 469 families and 1594 children under its care. Under the supervision of the Board there were, at the time of this study, 147 children under 16 years of age living in the rural sections and villages of Erie County.

The County Board of Child Welfare is required by law to have a physical examination for all children under its supervision. The examination is at present done at the Diagnostic Clinic, connected with the Children's Hospital, and is probably rather carefully done there. If defects such as tonsils and adenoids are found, the children are usually sent to the Children's Hospital for operation immediately, on order from the County Board of Child Welfare.

The policy of the Board on nutritional problems in the homes of their children is dealt with in the section of this report on Nutrition, the mental hygiene of their charges is referred to in the section immediately preceding this one and the Board's attitude on the question of maintaining families in which there are children of working age who have not yet completed their schooling is described in the next section following this one.

The Superintendent of the Poor—At the time of this study there were reported to be approximately 2358 children under the charge of the Superintendent of the Poor of whom 1298 were in orphan asylums and other institutions, and 1060 were in boarding homes, in free private homes or with their mothers to whom maintenance was being paid by the county.

At the time of the study 118 of these dependent children under supervision were from sections of the county covered by this study. This is about one-tenth of the whole outside of institutions, who are under the care of the Superintendent of the poor at any one time.

Eighteen of these were dependent because of the illness or death of one or both parents from tuberculosis; 22 were children of widows;

41 had fathers who had deserted; 13 had fathers unable to work because of illness or disability; 8 were orphans; 5 had feeble-minded mothers; 3 were children of a father indicted for manslaughter, and 8 were motherless.

It is the custom of the Superintendent of the Poor's office to leave children with the mother wherever this is feasible, and to give her an allowance for their support. Sixty-eight of the 118 children were living with their mothers, and 19 others were living with grandmother, aunt, or some member of the family, so that nearly three-fourths of these dependent children were being maintained in their own family homes. Eleven children were in regular boarding houses, 6 in free homes or adopted, and 14 in institutions.

So far as physical examinations are made of those children not committed to an institution who are under the care of the Superintendent of the Poor, this is done through one of the health centers under the Department of Hospitals and Dispensaries. There is no way of determining the number of these examinations made, but it is apparent from records which were read that a thorough physical examination of dependent children is an exception rather than a rule unless they are committed to an institution. For those who are placed in boarding homes, there is no regular supervision by a trained health worker, a nurse, or a physician. It is left to the judgment of the boarding home keeper to decide whether the child should be taken to a physician or not.

CHILDREN'S AID—In the Children's Aid Society there are two classes of children under its supervision; those who live in the county and who are neglected, and the children who are brought to the Shelter in Buffalo and are kept there for some time. The former class do not receive a regular physical examination as a routine, but the latter do have a very thorough examination and diagnosis.

At the time of the study there were children from 23 families in the county under supervision by the Children's Aid Society, comprising in all 82 children. Forty-one had come under supervision because of neglect; 10 because of non-support, (a single family); 6 because of abuse; 9 because of destitution; 10 because the mother had died of tuberculosis; 3 for truancy; 1 abandoned; and 2 were temporary cases while the mother was in the hospital. Fifty-eight were kept under supervision, the 10 contact tuberculosis cases were referred to the tuberculosis dispensary, 11 cases were referred to the Superintendent of the Poor, 2 truants were returned to their homes, and 1 child committed to the State Custodial School at Rome.

Only 11 of these 82 children had had a thorough physical examination.

Sick Children—Indigent children who need hospital care are ered at either the City Hospital, the Ernest Wende Hospital (for tagious diseases), the County Hospital, or the Children's Hospital, order from the Superintendent of the Poor. From such inquiries were made there was no evidence that children from rural sections the county, for whom hospital care was definitely recommended, led to receive such care. The chief problem in securing proper spital care for children in Erie County is one of the discovery of see needing attention, proper diagnosis and follow-up so that the ldren may be sent to the hospitals when they need such attention.

Dependent Children in Institutions—Because of the brief time silable for this study of child health in Erie County it was imposle to make a study of general health conditions and measures in the titutions for dependent children.

COMMENDATIONS

Note. Other recommendations relating to dependent children ll be found in the sections of this report on mental hygiene and nution and will not be repeated here.

⁽¹⁾ It is recommended that those children who come under the care of he Superintendent of the Poor receive a physical and mental examination is a rule rather than in exceptional cases.

⁽²⁾ It is recommended that regular supervision of boarding homes by trained health worker, preferably a trained nurse, be provided, to be supplemented by medical attention to the children and medical supervision of the home wherever needed.

XIV. HEALTH AND WORKING CERTIFICATES

REQUIREMENTS AS TO HEALTH—According to Section 631, Sub. 4, of the New York State Compulsory Education Laws, a child between 14 and 16 years of age wishing to leave school to go to work must, s together with certain other qualifications, have "reached the normal development of a child of his age" and be "in sound health and physically fit to perform the work he intends to do." The official responsible for deciding whether the above qualifications are met is the "medical officer of the board of health" of the town in which the child resides. If the qualifications are met the medical officer issues "to the minor a certificate of physical fitness stating these facts." If the minor is "found to be physically unfit," he is rejected and the employment certificating officer is notified so that an employment certificate may not be issued for the child. In rural districts since September 1st, 1921, the employment certificating officer is by law the district superintendent of the school district in which the child resides. To him are submitted for final approval all the required papers, including the physician's statement of a child's physical condition.

In addition to the qualification of physical fitness to go to work a child must also fulfill several other requirements. His parent must sign a written application to his school principal for a school record certificate. He must obtain the school record certificate from his principal showing that he has complied with certain educational standards, e. g. if he is 14 years of age he must have completed the eighth grade of elementary school, if 15 he must have completed the sixth grade. He must have also have attended school for not less than 130 days in the preceding twelve months. He also is required to prove his age satisfactorily by means of a birth or baptismal certificate or other document specified in the law. Again he must have written promise of prospective employment from an employer and finally if these papers with the certificate of physical fitness are approved he must pass a literacy test in reading and writing simple sentences in the English language.

A Sketch of the Problem—Eric County has 5 school districts with 5 separate district superintendents or supervisors, with a total school population of about 20,000 children between the ages of 7 and 21. 27 different town health officers in these 5 school districts have the legal duty of giving the physical examinations to children applying for employment certificates. The following outline gives a rough picture of the character of these districts:

| Headquarters | Approximate School Population | No. of Schools | No. of Teachers | No. of Health Officers | No. of Emp. Certs. Issued to Dec. 15 | Character of District |
|---|-------------------------------------|--|-----------------|---------------------------|---|---|
| First District Clarence District Superintenent, Mr. Heist, Disance from farthest chool, 28 miles. | 4300 | 57 Pub. 5 Par. | 140 | 5 | 4 | Farming and small towns uear Buffalo. Children work in Buffalo and at home. |
| Second District Lancaster District Superinten- lent, Mr. H. Dann. Distance from farth- st school, 8 miles. | 7500 | 57 Pub. 15 Par. | 175 | 6 | 40 | Farming and small towns. Shops near Lancaster and at De- pew. |
| Third District East Aurora District Superintenent, Mr. Pierce. Disance from farthest school, 10 miles. | 3000 | 46 Pub. 5 Par. [4 Cath.] 1 Luth.] | 99 | 5 | 6 | Large farming district. Shops at East Aurora and Orchard Park. |
| Fourth District North Collins District Superinten- lent, Mr. Ormsby. Distance from farth- est school, 12 miles. | 2500 | 49 Pub. 4 Par. | 103 | 5 | 15 | Intensive farming district. Said to be one of most prosperous in U. S. Many owner farmers. Small factories near Aurora and canneries in North Collins |
| Fifth District Springville District Superinten- lent, Mr. Bensley. Distance from farth- est school, 15 miles. | 2100 | 55 Pub. 2 Par. | 88 | 6 | 12 | Farming district. Hypodermic needle factory at Springville and a few canneries. |

The Usual Procedure—When a child in the rural districts applies for an employment certificate the school principal usually notifies the listrict superintendent, unless informed that he will visit his school or one nearby at an early date, and also sends immediately to the State Department of Education in Albany for a school record certificate plank that it may be filled in properly to present to the district superntendent. In all the school districts the principals have the blanks for the parent's application and for the employer's statement and these are often filled in previous to the visit of the district superintendent n order to save delay. However, as most of the children expect to

go to work on the farm or in the home the parent is also the prospective employer and appears before the district superintendent and signs the blank in his presence. The children at the same time must also submit evidence of age.

Other methods which are used to avoid delays are not in practice in all the districts or at all times. For instance, one district superintendent pays especial attention to informing the different school principals when he expects to visit their schools, giving them an opportunity in most cases to secure the school record blank from Albany beforehand and thus to avoid possible delay; and another in addition to multigraphing instructions to all the teachers, informs them of the salient features of the law and gives his office hours at certain schools so that children may be sent to the nearest one on the specified date.

The physician's statement as to the child's fitness is, especially in the case of one district, secured before the superintendent's visit together with the other papers necessary for submission to him, and this means a saving of time, especially in cases where the health officer is too far away to fill in the necessary physical examination papers on the day of the superintendent's visit after the superintendent has reviewed the application blank, employer's statement, etcetera.

The superintendents are all desirous of making the administration of the law as easy as possible for the parents and children and for prospective employers in cases where they are not the parents. Through the exchange of information and the development of uniformity in methods, they can doubtless avoid a good many of the present delays.

However, in instances where the child has applied within too short a time to have secured the school record blank from Albany it is impossible for the superintendent to issue an employment certificate until this blank has been received. This means that in spite of any arrangements that might be made to the contrary, in some instances there will be unavoidable and undesirable delay, in cases where the child is fully qualified to receive the certificate, as the child must either wait until the next visit of the superintendent or go direct to him in the interim.* In the first district the superintendent's office is 28 miles from the farthest school, in the second about 8 miles, in the third and fourth about 10 miles, and in the fifth about 18 miles. In one district, where his office is centrally located, the superintendent has office hours every Monday.

In actual practice children who are otherwise qualified but have not secured the school record blank from Albany, while waiting for

^{*}Between the dates of the writing of this report and its publication a law has been passed authorizing the Superintendent of School Districts to deputize individuals to act for them in this matter of employment certificates. This should materially expedite the process.

the return visit of the superintendent, go to work in the interim without the employment certificate.

REFUSAL OF CERTIFICATE—Aside from the fact that a child may apply who has not finished the grade requirements, and may be refused, (in this case not being technically considered an applicant) it is apparent that the only occasion on which a child may be legally refused a certificate is at the time the superintendent passes upon his documents and literacy and at the physical examination. As the examining physician also is supposed to pass upon the evidence of age the possibility of rejection for unsatisfactory documents exists here also.

Except in the first district the literacy test has been given to all children who have been granted employment certificates in the county. The district superintendent of the first district stated that he had not given this test because each of the four children applying held regent's certificates and he deemed it unnecessary. One child in the second district has been refused a certificate and made to return to school for failure to pass the literacy test, though in the seventh grade. The superintendent in this district requires the child to write a well formulated letter of some length. This child constitutes the only case, temporary or permanent, of refusal for any cause in the county. The district superintendents are of the opinion, however, that most children can pass a simple literacy test even if not in the proper grade and that it is unnecessary except for backward or foreign children.

Not Used for Correction of Defects—No child has been refused a certificate because of physical unfitness nor has any been held up temporarily while receiving treatment for minor defects. In fact, to the majority of the health officers interviewed, it had not, apparently, occurred that such a procedure was possible. They have assumed that the requirement of an employment certificate was sufficient prohibition and regarded their function as a mere matter of form through which the child was required to go before being granted a certificate. Again, since the new law made the district superintendents the issuing officer, the health officers, upon whom previously devolved the entire duty of passing upon documents and of issuance, have neglected to examine the submitted evidence of age though that is still their duty. This is now left to the district superintendents entirely. The health officers interviewed appeared to believe that their sole duty now is to pass upon the child's physical condition.

The requirement of the law that a child shall be physically fit to go to work has no apparent effect in Erie County inasmuch as examinations are admittedly perfunctory and health officers do not take advantage of the opportunity to require children to take treatment for minor defects. Those expressing themselves were unanimous in regarding these examinations as outside the province of the health officer as prescribed in the Public Health Law but they were divided however, in thinking a fee is desirable, some preferring it to be withdrawn from them altogether and others believing that a fifty cent or one dollar fee would reimburse them for the trouble. However, some expressed the view that if paid a fee they would feel under obligations to do the work more carefully and also to hold up children temporarily as they would then be paid for the examination and not merely for signing a statement.

Change in Administration Approved—The district superintendents are satisfied to have the work of issuance in their hands, the majority believing that this change will bring greater care in the issuance of certificates. Although refusals are not common, they are much interested in keeping the child in school and believe that as time goes on they will have more opportunity to keep children in school than was the case under the health officer's administration. The District Superintendents are of one accord in approval of the present law and made no suggestions for its improvement at present, although, they were in favor of raising the age to 16 years several years hence.

COMMENT ON PRESENT METHODS-On the other hand, it was felt there was opportunity for improvement of the administrative procedure between the local authorities and the State Department of Education. The chief difficulty is the necessity of sending to Albany for the school record certificate blank every time a child applies. Aside from the annoyance to the principal, the delay caused by such procedure as already mentioned, is a serious matter and the chief cause of illegal absence from school and of illegal employment, especially of those who have applied. Another source of complaint is the number of forms to be filled in and the trips some children have to make before finally securing the certificate for which they are qualified. At a joint meeting of the district superintendents and attendance officers with the inspector for the State Department of Education, held in Buffalo on December 12th, 1921, a resolution was passed to be presented to the State Department to the effect that the parents' application blank and school record certificate be combined so as to eliminate at least one form.

The health officers state that the physical examination form is too

small but as they do not attempt to use it as intended they are not seriously hampered.

ERIE COUNTY BOARD OF CHILD WELFARE—The policy of the majority of this Board has been to keep children in school until 16. Several cases were noted where the mother had wanted to put the child to work or to keep the child at home to help her with other children and the Secretary has succeeded, sometimes with great difficulty in having the mother keep on taking the allowance. In a few cases scholarships to special schools have been secured for children past 14 and for some after 16, so that they might not have to go to work. When children have working papers the workers of the Board keep in touch with them and promote their advancement both in pay and position.

The Board keeps track of school attendance of children under its supervision by obtaining monthly reports of attendance from teachers. These show conduct, work and attendance. The workers take up the matter with both attendance officers and mothers in case there is any laxity about school attendance. There has been difficulty in a few cases where the child was of working age but not able to fulfill requirements for a working certificate. The attendance in these cases has been poor and it has been difficult to control the children.

In all the Board has only 147 children under 16 under supervision in Erie County, outside of Buffalo, Tonawanda, Gowanda, Lancaster and Lackawanna.

RECOMMENDATIONS

1. It is recommended that the physical examinations for employment certificates by the health officer be under the direct supervision of the proposed full-time health official of the county or subdivision of the county. Also that copies of the reports of the examinations be forwarded to Albany by way of this health official, thus enabling him to check the efficiency of the work and note whether physical defects are permitted to pass unremedied and to influence the local health officers to see that these defects are corrected and that physically unfit children are excluded from employment.

The use of the child's school health record as one item upon which to judge of his fitness to go to work or of the necessity for the correction of defects before a permit is issued could be brought about through such supervision.

- 2. It is recommended that the School Superintendents determine upon the best standards of requirements for granting employment certificates and maintain them uniformly.
- 3. It is recommended that the State Department of Education modify the present system of requiring school record certificates to be obtained from Albany for individual applicants.

ADDITIONAL MATERIAL

In the original report of this child health inquiry, which was sent to the representatives of Erie County, who requested it, were included several tables of facts and figures which, while of especial interest locally, did not seem to be of sufficiently general interest to justify the expense and space of publication in this edition of the report. These addenda gave the following information:

- 1. Lists of text-books used in the schools.
- 2. Tabulation of the training qualifications of teachers.
- 3. Mortality and birth rates by registration districts for the rural sections and villages of the county, 1915-1920, inclusive.
- 4. Statement from the State Department of Education summarizing the result of medical examinations, 1920-1921.
- 5. Tabulation of answers to questionnaire on school buildings and environment.
- 6. Table showing progress made in the control of communicable diseases.

Cornell University Library 1.N7E6n

health in Erie County, New York.Th
3 1924 003 500 943

